State of Ohio Environmental Protection Agency

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

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

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

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL
SCIOTO COUNTY
Application No: 07-00587
Fac ID: 0773000215

DATE: 5/6/2008

	TOXIC REVIEW
Y	**PSD**
	SYNTHETIC MINOR
Y	**CEMS**
Subpart CCC	**MACT**
Subpart Dc, AAa and Y	**NSPS**
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	**MODELING SUBMITTED**
	GASOLINE DISPENSING FACILITY

New Steel International, Inc.
Mike Apgar
6730 Roosevelt Avenue
Franklin, OH 45005

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **PCHD**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install		**Issue Date:**	**5/6/2008**
Terms and Conditions		**Effective Date:**	**5/6/2008**

FINAL PERMIT TO INSTALL 07-00587

Application Number:	07-00587
Facility ID:	0773000215
Permit Fee:	**$80400**
Name of Facility:	New Steel International, Inc.
Person to Contact:	Mike Apgar
Address:	6730 Roosevelt Avenue Franklin, OH 45005

Location of proposed air contaminant source(s) [emissions unit(s)]:
Gallia Pike
Franklin Furnace, **Ohio**

Description of proposed emissions unit(s):
Installation of a new integrated steel mini-mill facility.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping 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.

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, 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. 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.

iv. If this permit is for an emissions unit located at a Title V facility, then 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 are true, accurate, and complete.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

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.

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.

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 re-issuance, or modification

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, revoked, or revoked and reissued, for cause. 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 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.

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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.

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.

10. Permit-To-Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. 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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
PM (stack)	971.77
PM (fugitive)	173.48
PM_{10} (stack)	971.49
PM_{10} (fugitive)	38.01
SO_2	**2518.53**
NOx	**2060.64**
CO	10617.58
VOC	288.60
Lead	0.59
Fluoride	82.67
HF	**2.94**
HCl	**35.4**
H_2SO_4	**59.7**
Hg	**0.02**

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. Emissions Offset requirements

   Prior to beginning actual construction, New Steel International shall submit a letter to the Portsmouth LAA and to Ohio EPA documenting that New Steel International, Inc. has obtained legal ownership of the particulate emission offsets obtained from the shutdown of the New Boston Coke facility (Facility ID 07-73-01-0004, emission units IDs B001, B002, B008, B009, B901, F001, P001**,** Z001, Z002, Z003, Z005) and from the shutdown of the Ironton Iron facility (Facility ID 07-44-01-0008, emission units IDs F001, F002, F003, F004, F005, P005, P011, P013, P014, P912, P922, P923, X001, X002, X003, Z001, Z002, Z007, Z008, Z028, Z030 and Z031). The emissions offsets shall include the following amounts and types:

Pollutant	Offset Available (tons/yr)	Source
PM 10 filterable	281.87	New Boston Coke
PM condensable	615.44	New Boston Coke
PM 10 filterable	274.58	Ironton Iron
PM condensable	48.36	Ironton Iron

2. Prior to starting construction, the permittee shall certify that the modeling completed is consistent with the property owned.

3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart AAa: P018 and P019. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Portsmouth Local Air Agency.

4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart CCC: P031, P032, P033, P035, P036 and T001 through T008. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Portsmouth Local Air Agency.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B001 - Boiler 1 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B001 / P001 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.13 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \qquad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and

transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the

letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD,

the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous

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

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and

n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30

days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

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

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV. 11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall

be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B001/P001 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B001/P001 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B001/P001 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B001/P001 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B001/P001 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B001/P001 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B001/P001 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B001/P001 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B001/P001 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B001/P001 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B001/P001 exhaust stack shall not exceed 0.13 pound per hour and 0.49 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B001/P001 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B001/P001 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B001/P001 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02,

Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and

Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl

concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B001 - Boiler 1 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B002 - Boiler 2- pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B002 / P002 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} -use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.13 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and

transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the

letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The

Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III.13.d below and Table 6 of 40 CFR Part 63, Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the

analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III.13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III.13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of 63.7530, that were done to

demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default

moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

    The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

   The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

   b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

      i. the facility name and address;

      ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

      iii. the location of the continuous SO_2 monitor;

      iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the

applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within

30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

a. a description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls

used on the source , description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test;

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV.11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall

be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B002/P002 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B002/P002 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B002/P002 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B002/P002 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B002/P002 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B002/P002 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B002/P002 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B002/P002 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B002/P002 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B002/P002 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B002/P002 exhaust stack shall not exceed 0.13 pound per hour and 0.49 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B002/P002 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B002/P002 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B002/P002 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and

Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and

Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl

concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B002 - Boiler 2 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B003 - Boiler 3 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B003 / P003 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.
On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.13 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-

site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance

Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III.13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III.13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD,

the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III.13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III.13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous

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

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and

any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

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

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV.11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall

be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B003/P003 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B003/P003 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B003/P003 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B003/P003 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B003/P003 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B003/P003 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B003/P003 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B003/P003 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B003/P003 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B003/P003 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B003/P003 exhaust stack shall not exceed 0.13 pound per hour and 0.49 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B003/P003 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B003/P003 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B003/P003 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02,

Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and

Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl

concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B003 - Boiler 3 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B004 - Boiler 4 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B004 / P004 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.
On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.13 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-

site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance

Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III.13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III.13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III.13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III.13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous

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

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and

n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below;

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30

days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

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

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV.11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall

be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B004/P004 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B004/P004 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B004/P004 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B004/P004 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B004/P004 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B004/P004 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B004/P004 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B004/P004 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B004/P004 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B004/P004 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B004/P004 exhaust stack shall not exceed 0.13 pound per hour and 0.49 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B004/P004 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B004/P004 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B004/P004 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02,

Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and

Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl

concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B004 - Boiler 4 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B005 - Boiler 5 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B005 / P005 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.13 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and

transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the

letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The

Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

    The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

    The permittee must conduct fuel analyses according to the procedures in sections A.III.13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

    a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

        1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

        2. the permittee must include the information contained in sections A.III.13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

            i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

            ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

            iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

            iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

            v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

            vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the

analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III.13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III.13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

    The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

    For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

    d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of 63.7530, that were done to

demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40

CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

    The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

   The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

   b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

      i. the facility name and address;

      ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

      iii. the location of the continuous SO_2 monitor;

      iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the

applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within

30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

a. a description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls

used on the source , description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test;

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV.11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall

be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B005/P005 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B005/P005 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B005/P005 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B005/P005 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B005/P005 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B005/P005 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B005/P005 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B005/P005 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B005/P005 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B005/P005 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B005/P005 exhaust stack shall not exceed 0.13 pound per hour and 0.49 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B005/P005 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B005/P005 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B005/P005 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The

permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B005 - Boiler 5 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B006 - Boiler 6 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound~~s~~ per hour and 0.49 ton~~s~~ per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound~~s~~ per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) , OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-31-28 and 40 CFR Part 60, Subpart Db.
OAC rule 3745-31-05(C)	Pb emissions from the B006 / P006 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
40 CFR Part 60, Subpart Db	No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The particulate matter emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). The SO2 emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20). The NOx emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.
OAC rule 3745-110-03(D)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.1 through A.II.3;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.7 through A.IV.14; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the

continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.18. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

The permittee shall conduct fuel analyses according to section A.III.~~18~~ **13** below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.3.a.i through A.II.3.a.iii below.

i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.3.b.i through A.II.3.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \qquad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.3.c.i through A.II.3.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

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

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

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

4. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-

site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance

Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III. 13.a.1 and A.III. 13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD,

the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

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

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

d. a copy of all calculation and supporting documentation of maximum mercury fuel input, using Equation 7 of 63.7530, that were done to demonstrate continuous

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

18. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

19. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

20. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

21. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

22. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

23. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and

any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street
Third Floor
Portsmouth, Ohio 45662

5. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

6. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

Compliance with the standards has or has not been achieved during the reporting period.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.10.a through A.IV.10.h below.

a. a description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls

used on the source , description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test;

b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

e. identification of whether you plan to demonstrate compliance by emissions averaging;

f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.11.a through A.IV.11.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.11.a through A.IV.11.d above.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV. 12.a through A.IV.12.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury

input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV. 12.a through A.IV. 12.i above and the information required in sections A.IV.13.a through A.IV.13.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.12.a through A.IV.12.i above and the information required in sections A.IV.14.a through A.IV.14.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

15. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to

Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B006/P006 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B006/P006 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B006/P006 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B006/P006 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance through the emissions testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B006/P006 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B006/P006 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B006/P006 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B006/P006 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B006/P006 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60,

Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B006/P006 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B006/P006 exhaust stack shall not exceed 0.13 pounds per hour and 0.49 tons per year.
Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B006/P006 exhaust stack shall not exceed 1.0 pounds per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

Hg emissions from the B006/P006 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

s. Emission Limitation:

Hg emissions from the B006/P006 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Opacity Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific

monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B006 - Boiler 6 - pulverized coal-fired and CO and heat exiting the RHF boiler controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B007 - Natural gas fired boiler No. 1 for the Vacuum Degasser system equipped with a low NOx burner

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-17-07(A)(1), OAC rule 3745-18-06(A) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 4.23 pounds per hour and 18.53 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 2.52 pounds per hour and 11.04 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.03 pound per hour and 0.13 ton per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.28 pound per hour and 1.23 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM_{10}) shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	as provided by the rule.
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	Exempt pursuant to OAC rule 3745-18-06(A) when burning natural gas.
OAC rule 3745-21-08(B)	See section A.I.2.c below.
40 CFR 60 Subpart Dc	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rule 3745-31-(10) thru (20) above

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rule 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is not subject to the emission limitations listed in 40 CFR Part 60, Subpart Dc as long as natural gas is the only fuel burned.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

      Applicable Compliance Method:

      If required, compliance shall be determined through visible 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)(1).

   b. Emission Limitation:

      PM/PM_{10} emissions shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

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

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 4.23 pounds per hour and 18.53 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 2.52 pounds per hour and 11.04 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.28 pound per hour and 1.23 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.03 pound per hour and 0.13 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B007 - Natural gas fired boiler No. 1 for the Vacuum Degasser system equipped with a low NOx burner

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - B008 - Natural gas fired boiler No. 2 for the Vacuum Degasser system equipped with a low NOx burner

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27), OAC rule 3745-17-07(A)(1), OAC rule 3745-18-06(A) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 4.23 pounds per hour and 18.53 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 2.52 pounds per hour and 11.04 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.03 pound per hour and 0.13 ton per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.28 pound per hour and 1.23 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM_{10}) shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	Exempt pursuant to OAC rule 3745-18-06(A) when burning natural gas.
OAC rule 3745-21-08(B)	See section A.I.2.c below.
40 CFR 60 Subpart Dc	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rule 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rule 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is not subject to the emission limitations listed in 40 CFR Part 60, Subpart Dc as long as natural gas is the only fuel burned.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

      Applicable Compliance Method:

      If required, compliance shall be determined through visible 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)(1).

   b. Emission Limitation:

      PM/PM_{10} emissions shall not exceed 0.39 pound per hour and 1.71 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

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

      The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 4.23 pounds per hour and 18.53 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 2.52 pounds per hour and 11.04 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.28 pound per hour and 1.23 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.03 pound per hour and 0.13 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0245 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - B008 - Natural gas fired boiler No. 2 for the Vacuum Degasser system equipped with a low NOx burner

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - F001 - Paved roadways and parking areas

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	No visible PE except for one minute during any 60-minute period Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.I.2.a through A.I.2.e.) The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (27).
OAC rules 3745-31-10 thru 20	153.4 tons/year of fugitive particulate emissions (PE)
OAC rules 3745-31-21 thru 27	29.9 tons/year of fugitive particulate matter of 10 microns or less (PM10)

2. Additional Terms and Conditions

2.a The permittee shall employ best 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 application, the permittee has committed to treat the paved roadways and parking areas by application of wet suppression, speed reduction, vacuuming, and/or sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.b 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 paved roadways and parking areas that are 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.c 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.d 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.e Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

paved roadways and parking areas	minimum inspection frequency
all roads and parking areas	daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the roadways and parking areas from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the roadways and parking areas indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the roadways and parking areas if the inspections of the roadways and parking areas indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the roadways and parking areas that indicate no need for implementing the above-mentioned control measures.

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that

day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

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

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

   c. the dates the control measures were implemented; and

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

   The information required in section A.III.3.d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit 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 limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitations:

      29.1 tons/year of fugitive PM10
      153.4 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (11/06) for paved roadways.

b. Emission Limitation:

No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed 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").

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - F001 - Paved roadways and parking areas

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P001 - Rotary Hearth Furnace 1 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pounds per hour and 0.49 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B001 / P001 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B001 / P001 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units

of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum coal combusted in the RHF burners shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.4.a through A.II.4.c below, as applicable.

   a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.4.a.i through A.II.4.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \quad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i)\right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i through A.II.4.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \qquad \text{(Eq. 7)}$$

where:

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

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

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest

mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i; and

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

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10 [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

b. each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications

and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997;

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

   i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

   ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

   iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

   iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

   v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

   vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III. 13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.II. 14.a through A.III. 14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include

results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18. The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency,

documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

   g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

16. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through

demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B001/P001 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitations:

PM_{10} (filterable + condensable) emissions from the B001/P001 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B001/P001 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B001/P001 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitations:

SO2 emissions from the B001/P001 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B001/P001 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B001/P001 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B001/P001 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B001/P001 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B001/P001 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B001/P001 exhaust stack shall not exceed 0.13 pound per hour and 0.49 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B001/P001 exhaust stack shall not exceed 1.0 pound per hour and 3.94 tons per year.
Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B001/P001 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B001/P001 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

    If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

    The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

    The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

    a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

    b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

    c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

    The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

    The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

    The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

    The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

    The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

    The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide

work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P001 - Rotary Hearth Furnace 1 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. Additional Terms and Conditions

2.a 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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P002 - Rotary Hearth Furnace 2 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pound per hour and 0.49 ton per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pound per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B002 / P002 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.35 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B002 / P002 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units

of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum coal combusted in the RHF burners shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.4.a through A.II.4.c below, as applicable.

   b. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.4.a.i through A.II.4.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \quad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i)\right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i through A.II.4.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \qquad \text{(Eq. 7)}$$

where:

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

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

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest

mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i; and

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

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

b. each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications

and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997;

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III. 13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III. 13.a.1 and A.III. 13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III. 13.a.2.vi below in the fuel analysis plan.

   i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

   ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

   iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III. 13.b and A.III. 13.c below;

   iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

   v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

   vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III.13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III.13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include

results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18. The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and

B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

   a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

   b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

   c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

   d. Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

   As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B002/P002 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B002/P002 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B002/P002 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B002/P002 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B002/P002 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.35 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B002/P002 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section

A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B002/P002 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B002/P002 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B002/P002 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B002/P002 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B002/P002 exhaust stack shall not exceed 0.13 pounds per hour and 0.49 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B002/P002 exhaust stack shall not exceed 1.0 pounds per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B002/P002 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B002/P002 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A

H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

   If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

   a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

      i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

      ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

      iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

   b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

      i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

      ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

      iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

   c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

   d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case,

the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P002 - Rotary Hearth Furnace 2 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

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

   a. Emission Limitations:

   Hg emissions from the B002/P002 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29

of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section B.V.2).

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for Hg in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

      Hg Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

      Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

   e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   f. Personnel from the Portsmouth 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.

   g. 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P003 - Rotary Hearth Furnace 3 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pounds per hour and 0.49 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B003 / P003 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B003 / P003 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units

of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum coal combusted in the RHF burners shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.4.a through A.II.4.c below, as applicable.

   a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.4.a.i through A.II.4.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i through A.II.4.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

HG_i	=	Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pound per million Btu;
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i; and
n	=	Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The

continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11 The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III.13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

   i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

   iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III. 13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III. 17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl

emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18 The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

19 The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The time of the inspection as well as the presence or absence of any visible fugitive emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;

t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if

any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.
c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

   If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

16. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]
   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall

conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

   Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

   a. Emission Limitations:

      PM (filterable + condensable) emissions from the B003/P003 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

      Applicable Compliance Methods:

      The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

      Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B003/P003 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B003/P003 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B003/P003 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B003/P003 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B003/P003 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B003/P003 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B003/P003 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B003/P003 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B003/P003 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B003/P003 exhaust stack shall not exceed 0.13 pounds per hour and 0.49 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B003/P003 exhaust stack shall not exceed 1.0 pounds per hour and 3.94 tons per year.
Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B003/P003 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B003/P003 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

   Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is

representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

    The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

    The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

    The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

    The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

    The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P003 - Rotary Hearth Furnace 3 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P004 - Rotary Hearth Furnace 4 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pounds per hour and 0.49 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B004 / P004 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B004 / P004 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and

representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum **coal combusted in the RHF burners** shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.4.a through A.II.4.c below, as applicable.

   b. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.4.a.i through A.II.4.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \quad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i)\right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i through A.II.4.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \qquad \text{(Eq. 7)}$$

where:

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

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

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not

necessary to determine the value of this term. Insert a value of "1" for Q_i; and

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

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10 [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11 The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III. 13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III.13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

   i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

   ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

   iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

   iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

   v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

   vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III. 13.b.1 or A.III. 13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

   i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III. 13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III. 13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III. 14.a through A.III. 14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III. 15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel

type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18 The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

16. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

   Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

   a. Emission Limitations:

      PM (filterable + condensable) emissions from the B004/P004 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

      Applicable Compliance Methods:

      The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

      Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B004/P004 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.
Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B004/P004 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B004/P004 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B004/P004 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B004/P004 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B004/P004 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B004/P004 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B004/P004 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B004/P004 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B004/P004 exhaust stack shall not exceed 0.13 pound~~s~~ per hour and 0.49 ton~~s~~ per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B004/P004 exhaust stack shall not exceed 1.0 pound~~s~~ per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B004/P004 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B004/P004 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

    If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

    The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

    The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

    a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

    b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

    c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

    The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

    The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

    The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

    The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

    The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

    The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide

work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P004 - Rotary Hearth Furnace 4 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P005 - Rotary Hearth Furnace 5 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pounds per hour and 0.49 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B005 / P005 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B005 / P005 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.i [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units

of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum coal combusted in the RHF burners shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.**4**.a through A.II.**4**.c below, as applicable.

   a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.**4**.a.i through A.II.**4**.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \quad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i)\right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i (through A.II.4.c.iii below.

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

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

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

(Eq. 7)

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right]$$

where:

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

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

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not

necessary to determine the value of this term. Insert a value of "1" for Q_i; and

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

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10 [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11 The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. 13.a through A.III. 13.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III. 13.a.1 and A.III.13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

   i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

   ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

   iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III.13.b and A.III.13.c below;

   iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

   v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

   vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

   i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. **13**.c.1 through A.III.**13**.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III. 13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III. 14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III. 15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittiee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel

type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18 The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ingoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

   a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

   b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

   c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

   d. Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

   As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

16. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

   Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

   Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

   a. Emission Limitations:

      PM (filterable + condensable) emissions from the B005/P005 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

      Applicable Compliance Methods:

      The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

      Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B005/P005 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B005/P005 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B005/P005 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B005/P005 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B005/P005 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B005/P005 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B005/P005 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B005/P005 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B005/P005 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B005/P005 exhaust stack shall not exceed 0.13 pounds per hour and 0.49 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B005/P005 exhaust stack shall not exceed 1.0 pound~~s~~ per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B005/P005 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B005/P005 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

    If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

    The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

    The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

    a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

    b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

    c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

    The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

    The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

    The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

    The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

    The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

    The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide

work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P005 - Rotary Hearth Furnace 5 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

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

   a. Emission Limitations:

   Hg emissions from the B005/P005 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29

of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section B.V.2).

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

   a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

   b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for Hg in the appropriate averaging period(s).

   c. The following test methods shall be employed to demonstrate compliance with the applicable emission limitations:

      Hg Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

      Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

   e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   f. Personnel from the Portsmouth 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.

   g. 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P006 - Rotary Hearth Furnace 6 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Lead (Pb) emissions shall not exceed 0.0070 pound per hour. Hydrofluoric acid (HF) emissions shall not exceed 0.13 pounds per hour and 0.49 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 1.0 pounds per hour and 3.94 tons per year. Mercury (Hg) emissions shall not exceed 0.00135 pound per hour and 11.83 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for a period of time not to exceed 1 minute during any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-51-05(C), OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-31-28.
OAC rule 3745-31-05(C)	Pb emissions from the B006 / P006 exhaust stack shall not exceed 0.028 ton per year as a rolling, 12-month summation. See section A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 thru 20	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Particulate matter (PM) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM (filterable + condensable) emissions shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.176 pound per million Btu (as a rolling, 3-hour average), 105.35 pounds per hour (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average), 48.61 pounds per hour (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pounds per hour and 18.40 tons per year as a rolling, 12-month summation. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.0042 pound per million Btu of actual heat input (as a 3-hour average), 2.52 pounds per hour and 9.95 tons per year as a rolling,12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Emissions from the B006 / P006 exhaust stack shall not exceed the following: Particulate matter emissions of less than ten microns (PM_{10}) (filterable) emissions shall not exceed 0.0024 gr/dscf. PM_{10} (filterable + condensable) shall not exceed 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gr/dscf, 21.48 pounds per hour and 86.80 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat input; or Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu heat input. HCl emissions shall not exceed 0.02 pound per million Btu heat input. Hg emissions shall not exceed 0.000003 pound per million Btu heat input. CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.
OAC rule 3745-17-10(B)	The particulate emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).
OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-79	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM - use of a lime spray dryer and baghouse with an emission limitation of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable);

NOx- use of low NOx burners and SCR with an emission limitation of 0.081 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.176 lb/mmBtu of actual heat input;

CO - use of good combustion practices with an emission limitation of 0.37 lb/mmBtu of actual heat input;

VOC - use of good combustion practices with an emission limitation of 0.007 lb/mmBtu of actual heat input; and

H_2SO_4 - use of lime spray dryer with an emission limitation of 0.0042 lb/mmBtu of actual heat input.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - use of a lime spray dryer and baghouse with emission limitations of 0.036 lb/mmBtu of actual heat input and 0.0127 gr/dscf (filterable + condensable).

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d This emissions unit is a new major MACT source as defined in section 112 of the Clean Air Act (CAA) and OAC rule 3745-31-01(HHH) and is subject to a Case-by-Case MACT determination pursuant to OAC rule 3745-31-28 due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD). In order to comply with the requirements of OAC rule 3745-31-28, the permittee has committed to comply with the requirements of the vacated Boiler MACT for "new, large, solid fuel boilers" as specified in the following terms terms and conditions*:

Sections A.I.2.e through A.I.2.g;
Sections A.II.2 through A.II.4;
Sections A.III.9 through A.III.10 and A.III.12 through A.III.17;
Sections A.IV.6 through A.IV.13; and
Sections A.V.5.n through A.V.5.q and A.V.7 through A.V.20.

*Note: these terms and conditions include specific rule citations to the vacated Boiler MACT (40 CFR Part 63, Subpart DDDDD). The rule citations have been included for reference purposes only in order to establish a complete and accurate Case-by-Case MACT determination.

2.e [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(a)]

The permittee must be in compliance with the emission limits (including operating limits) and the work practice standards of 40 CFR Part 63, Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

2.f [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(b)]

The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63, Section 63.6(e)(1)(i).

2.g [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(e)]

If the permittee has an applicable emission limit or work practice standard, the permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63, Section 63.6(e)(3).

2.h **[**40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units

of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.j [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

2.k [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Each continuous opacity monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. At least 45 days before commencing certification testing of the continuous opacity monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of opacity and compliance with Performance Specification 1. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

2.l The permittee shall install, operate, and maintain an activated lignite injection system for the control of mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 10.01 pounds of

activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.m During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from the Rotary Hearth Furnace (RHF)/Boiler sources. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on RHF/Boiler sources, (2) limited information is available concerning the effectiveness of the various control devices on this RHF/Boilers for mercury control, (3) there are limitations to data concerning the amount of mercury to be emitted from the coal that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by the RHF/Boiler is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.n This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.o The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.l and/or the mercury monitoring requirements specified in section A.III.20. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that participation in the National Vehicle Mercury Switch Removal Program is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum coal combusted in the RHF burners shall not exceed 109,500 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal throughput specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons
1	10,500
1-2	21,000
1-3	31,500
1-4	42,000
1-5	52,500
1-6	63,000
1-7	73,500
1-8	84,000
1-9	94,500
1-10	109,500
1-11	109,500
1-12	109,500

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 2, 2.a]

   The permittee shall install and operate a bag leak detection system according to 40 CFR Part 63, Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.

3. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Table 3, (4) and Table 4, (2)]

   The permittee shall maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to 40 CFR Part 63, Section 63.7530(c) and Table 7 to Subpart DDDDD that demonstrated compliance with the applicable emission limits for mercury and hydrogen chloride.

4 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, Section 63.7530(c)(1) through (3)]

   The permittee shall conduct fuel analyses according to section A.III.18 below and establish maximum fuel pollutant input levels according to sections A.II.4.a through A.II.4.c below, as applicable.

   a. The permittee must establish the maximum chlorine fuel input (Cl_{input}) during the initial performance testing according to the procedures in sections A.II.4.a.i through A.II.4.a.iii below.

      i. The permittee must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

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

iii. You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n} \left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

where:

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

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

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

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

b. If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in sections A.II.4.b.i through A.II.4.b.iii below.

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

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

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

$$TSM_{input} = \sum_{i=1}^{n} \left[(M_i)(Q_i) \right] \quad \text{(Eq. 6)}$$

where:

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

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

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

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

c. You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in sections A.II.4.c.i through A.II.4.c.iii below.

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

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

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

$$Mercury_{input} = \sum_{i=1}^{n} \left[(HG_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

where:

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

HG_i	=	Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pound per million Btu;
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i; and
n	=	Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

5. The permittee shall maintain a minimum activated lignite injection rate of 10.01 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.6, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous SO_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO_2 monitoring system including, but not limited to:

a. emissions of SO_2 in parts per million on an instantaneous (one-minute) basis;

b. emissions of SO_2 in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

6. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The

continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

7. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

The permittee shall install, operate, and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

9. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(h)(1) thru (3)]

If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the following requirements:

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

b. install and calibrate the device in accordance with manufacturer's procedures and specifications; and

c. at least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

10 [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7525(i)(1) thru (8)]

The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system according to the requirements below:

a. the permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter;

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

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

d. the bag leak detection system sensor must provide output of relative or absolute particulate matter loadings;

e. the bag leak detection system must be equipped with a device to continuously record the output signal from the sensor;

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

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

h. where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

11 The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month summation emission limitations.

12 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(f)]

The permittee must conduct a fuel analysis according to 40 CFR Part 63, Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR Part 63, Section 63.7540.

13 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7521(a) through (e)]

The permittee must conduct fuel analyses according to the procedures in sections A.III. **13**.a through A.III. **13**.d below and Table 6 of 40 CFR Part 63. Subpart DDDDD, as applicable.

a. the permittee must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in sections A.III. 13.a.1 and A.III. 13.a.2 below.

1. the permittee must submit the fuel analysis plan no later than 60 days before the date the permittee intends to demonstrate compliance;

2. the permittee must include the information contained in sections A.III. 13.a.2.i through A.III.13.a.2.vi below in the fuel analysis plan.

i. the identification of all fuel types anticipated to be burned in each boiler or process heater;

ii. for each fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis;

iii. for each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the permittee's procedures are different than sections A.III. 13.b and A.III.13.c below;

iv. for each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury;

v. if the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that will be used; and

vi. if the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD.

b. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in sections A.III.13.b.1 or A.III.13.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.13.b.1.i and A.III.13.b.1.ii below.

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

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

2. if sampling from a fuel pile or truck, collect fuel samples according to sections A.III.13.b.2.i through A.III.13.b.2.iii below.

   i. for each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile;

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

   iii. transfer all samples to a clean plastic bag for further processing.

c. Prepare each composite sample according to the procedures in sections A.III. 13.c.1 through A.III.13.c.7 below.

1. thoroughly mix and pout the entire composite sample over a clean plastic sheet;

2. break sample pieces larger than 3 inches into smaller sizes;

3. make a pie shape with the entire composite sample and subdivide it into four equal parts;

4. separate one of the quarter samples as the first subset;

5. if this subset is too large for grinding, repeat the procedure in section A.III. 13.c.3 with the quarter sample and obtain a one-quarter subset from this sample;

6. grind the sample in a mill; and

7. use the procedure in section A.III. 13.c.3 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

d. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD.

14 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(a)(1) through (3)]

The permittee must keep records according to sections A.III.14.a through A.III.14.c below:

a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 63.10(b)(2)(xiv);

b. the records in 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction; and

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

15 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(b)(1) through (5)]

For each CEMS, CPMS, and COMS, the permittee must keep records according to sections A.III.15.a through A.III.15.e below:

a. records described in 63.10(b)(2)(vi) through (xi);

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

c. previous (i.e., superceded) versions of the performance evaluation plan as required in 63.8(d)(3);

d. request for alternative to relative accuracy test for CEMS as required in 63.8(f)(6)(i); and

e. 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.

16 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(c)]

The permittee shall keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD, including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

17 [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7555(d)(1) through (5), as applicable]

For each boiler or process heater subject to an emission limit, the permittee must also keep the records in sections A.III.17.a through A.III.17.d below:

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

b. a copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl

emission rates, using Equation 9 of 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analysis and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler or process heater;

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

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

18 The permittee shall maintain monthly records of the following information:

a. the amount of coal combusted in the RHF burners; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

19 The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The time of the inspection as well as the presence or absence of any visible fugitive emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

20. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;

t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

21. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

22. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

23. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

24. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

25. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if

any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. the location of the continuous SO_2 monitor;

iv. the exceedance report as detailed in (a) above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. the location of the continuous NO_x monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

3. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous opacity monitor;

iii. the location of the continuous opacity monitor;

iv. the exceedance report as detailed in (a) above;

v. the total operating time (hours) of the emissions unit;

vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;

viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and

ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

5. The permittee shall submit a signed statement with each quarterly report indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.

c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.

d. Compliance with the standards has or has not been achieved during the reporting period.

6. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(c)]

As specified in 40 CFR Part 63.9(b)(4) and (b)(5), if the startup of the new or reconstructed source on or after November 12, 2004, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(d)]

   If required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(g)]

   The permittee must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to 40 CFR Part 63, Section 63.7530 and Table 7, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in 40 CFR Part 63, Section 63.7550.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7545(e)(1) through (9), as applicable]

   If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR Part 63, Section 63.7530(a), the perimttee must submit a Notification of Compliance Status according to 40 CFR Part 63. Subpart DDDDD, Section 63.9(h)(2)(ii). For each initial compliance demonstration, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR Part 63, Subpart DDDDD, Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in sections A.IV.9.a through A.IV.9.h below.

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

   b. summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;

   c. identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit;

   d. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis;

   e. identification of whether you plan to demonstrate compliance by emissions averaging;

   f. a signed certification that you have met all applicable emission limits and work practice standards;

g. a summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 of 40 CFR Part 63, Subpart DDDDD; and

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

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(b)(1) through (5)]

The permittee must submit each report by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the following requirements in sections A.IV.10.a through A.IV.10.e below.

a. the first compliance report must cover the period upon startup of the boiler or process heater and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the startup of the boiler or process heater;

b. the compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after startup of the boiler or process heater;

c. 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;

d. each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period;

e. for each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent reports according to the dates the permitting authority has established instead of according to the dates in sections A.IV.10.a through A.IV.10.d above.

11. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(c)(1) through (11)]

The compliance report must contain the information required in sections A.IV.11.a through A.IV.11.j below:

a. company name and address;

b. 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;

c. date of report and beginning and ending dates of the reporting period;

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

e. a summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

f. a signed statement indicating that you burned no new types of fuel. Or, if you did not burn a new type of fuel, you must submit the calculation of chlorine input, using equation 5 of 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of Hcl emission rate using Equation 9 of 63.7530 that demonstrates that your source is still meeting the emission limit for Hcl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis);

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

h. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 63.10(d)(5)(I);

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

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

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(d)(1) through (4)]

For each deviation from an emission limit or operating limit and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.12.a through A.IV.12.d below. This includes periods of startup, shutdown, and malfunction.

a. the total operating time of each affected source during the reporting period;

b. a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated;

c. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective actions taken; and

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

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7550(e)(1) through (12)]

For each deviation from an emission limitation and operating limit or work practice standard occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in sections A.IV.11.a through A.IV.11.i above and the information required in sections A.IV.13.a through A.IV.13.l below. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in 63.7505(d).

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

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

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

d. 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;

e. 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;

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

g. a summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

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

i. a brief description of the source for which there was a deviation;

j. a brief description of each CMS for which there was a deviation;

k. the date of the latest CMS certification or audit for the system for which there was a deviation; and

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

14. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month coal usage limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

15. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

16. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

2. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

   Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

   Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

   Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

   Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through

demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to 40 CFR Part 60, Appendix B, Performance Specification 1 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Portsmouth Local Air Agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Portsmouth Local Air Agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; ORC section 3704.03(I); and ASTMD 6216-98.

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

a. Emission Limitations:

PM (filterable + condensable) emissions from the B006/P006 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

b. Emission Limitation:

PM_{10} (filterable + condensable) emissions from the B006/P006 exhaust stack shall not exceed 21.48 pounds per hour, 0.036 pound per million Btu of actual heat input (as a 3-hour average), 0.0127 gr/dscf and 86.80 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

c. Emission Limitation:

PM (filterable) emissions from the B006/P006 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. Emission Limitation:

PM10 (filterable) emissions from the B006/P006 exhaust stack shall not exceed 0.0024 gr/dscf.

Applicable Compliance Methods:

The permittee shall demonstrate compliance based upon the emission testing performed in accordance with Method 201 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

SO2 emissions from the B006/P006 exhaust stack shall not exceed 105.35 pounds per hour (as a rolling, 3-hour average), 0.176 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 384.38 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

f. Emission Limitations:

NOx emissions from the B006/P006 exhaust stack shall not exceed 48.61 pounds per hour (as a rolling, 3-hour average), 0.081 pound per million Btu of actual heat input (as a rolling, 3-hour average) and 177.21 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

g. Emission Limitations:

CO emissions from the B006/P006 exhaust stack shall not exceed 0.37 pound per million Btu of actual heat input (as a rolling, 3-hour average), 220.0 pounds per hour (as a rolling, 3-hour average) and 963.60 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the record keeping required pursuant to section A.III and the associated emission factors derived from emission testing as specified in section A.V.6.

h. Emission Limitations:

VOC emissions from the B006/P006 exhaust stack shall not exceed 0.007 pound per million Btu of actual heat input (as a 3-hour average), 4.20 pound per hour and 18.40 tons per year as a rolling, 12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

i. Emission Limitations:

Pb emissions from the B006/P006 exhaust stack shall not exceed 0.0070 pound per hour and 0.028 ton per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pound per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month period emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

j. Emission Limitations:

H_2SO_4 emissions from the B006/P006 exhaust stack shall not exceed 2.52 pounds per hour, 0.0042 lb/mmBtu of actual heat input and 9.95 tons per year as a rolling,12-month summation.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with the pound per million Btu of actual heat input and pounds per hour emission limitations based upon emission testing performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

k. Emission Limitations:

HF emissions from the B006/P006 exhaust stack shall not exceed 0.13 pounds per hour and 0.49 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

l. Emission Limitations:

HCl emissions from the B006/P006 exhaust stack shall not exceed 1.0 pounds per hour and 3.94 tons per year.

Applicable Compliance Methods:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

Compliance with the tons per year as a rolling, 12-month summation emission limitation shall be demonstrated by the emission factors derived from emission testing as specified in section A.V.6.

m. Emission Limitation:

No owner or operator subject to the provisions of Subpart Db shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

n. Emission Limitation:

PM emissions shall not exceed 0.025 pound per million Btu of actual heat input;
or
Total Selected Metals emissions shall not exceed 0.0003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PM emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 5 or 17 of 40 CFR Part 60, Appendix A.

The permittee shall demonstrate compliance with the total selected metals emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A (see section A.V.6).

o. Emission Limitation:

HCl emissions shall not exceed 0.02 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 26 or 26A of 40 CFR Part 60, Appendix A.

p. Emission Limitation:

Hg emissions shall not exceed 0.000003 pound per million Btu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B or ASTM Method D6784-02 (see section A.V.6).

q. Emission Limitation:

CO emissions shall not exceed 400 parts per million by volume (ppmv) on a dry basis corrected to 7 percent oxygen.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with Methods 1 through 4 and 10, 10A or 10B of 40 CFR Part 60, Appendix A (see section A.V.6).

r. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

s. Emission Limitation:

Hg emissions from the B006/P006 exhaust stack shall not exceed 0.00135 pound per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon emission testing performed in accordance with ASTM Method D6784-02 (see section A.V.6).

t. Emission Limitation:

Hg emissions from the B006/P006 exhaust stack shall not exceed 11.83 pounds per rolling, 12-month period.
Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system shall be used to demonstrate compliance with this emission limitation.

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

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

b. The emissions testing shall be conducted to demonstrate compliance with the applicable emission limitations for PM, PM-10, NO_X, SO_2, VOC, CO, Pb, Hg, HCl, HF, H_2SO_4 and opacity, in the appropriate averaging period(s).

c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM	Methods 1 through 5 of 40 CFR Part 60, Appendix A
PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO2	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NOx	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10, 10A, or 10B (as appropriate) of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A
H_2SO_4	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
HF	Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A
HCl	Methods 1 through 4 and 26 or 26A (as appropriate) of 40 CFR Part 60, Appendix A
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A or Method 101A of 40 CFR Part 61, Appendix B, and ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
Opacity	Method 9 of 40 CFR Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

g. 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 Portsmouth 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 Portsmouth Local Air Agency.

7. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(c)]

The permittee can demonstrate compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above using fuel analysis if the emission rate calculated according to section 63.7530(d) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using performance testing.

8. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7505(d)]

If the permittee demonstrates compliance with any applicable emission limit established pursuant to OAC rule 3745-31-28 in section A.I.1 above through performance testing, the permittee must develop a site-specific monitoring plan according to the requirements in sections A.V.8.a through A.V.8.d below. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR Part 63, Section 63.8(f).

a. for each continuous monitoring system (CMS) required in this section, the permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses sections A.V.8.a.i through A.V.8.a.iii below. The permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the CMS.

i. installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; and

iii. performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan, the permittee must also address sections A.V.8.b.i through A.V.8.b.iii below.

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.8(c)(1), (c)(3), and (c)(4)(ii);

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR Part 63, Section 63.8(d); and

iii. Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR Part 63, Sections 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

9. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(a) through (c)]

a. For affected sources that elect to demonstrate compliance with any of the emission limits through performance testing, the initial compliance requirements include conducting performance tests according to 40 CFR Part 63, Section 63.7520 and Table 5 , conducting a fuel analysis for each fuel type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6, establishing operating limits according to 40 CFR Part 63, Section 63.7530 and Table 7, and conducting CMS performance evaluations according to 40 CFR Part 63, Section 63.7525.

b. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR Part 63, Section 63.7521 and Table 6 and establish operating parameter limits according to 40 CFR Part 63, Section 7530 and Table 8.

c. If the boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 mmBtu per hour or greater, the initial compliance demonstration is conducting a performance evaluation of the continuous emission

monitoring system for carbon monoxide according to 40 CFR Part 63, Section 63.7525(a).

10. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7510(g)]

    If the new or reconstructed affected source commences construction or reconstruction after November 12, 2004, the permittee must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

11. [OAC rule 3745-21-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7530(a)]

    The permittee must demonstrate initial compliance with each emission limit and work practice standard that applies by either conducting initial performance tests and establishing operating limits, as applicable, according to Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD or by conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Tables 6 and 8 of 40 CFR Part 63, Subpart DDDDD.

12. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7515(a)]

    The permittee must conduct all applicable performance tests according to 40 CFR Part 63, Section 63.7520 on an annual basis, unless the permittee follows the requirements listed in sections A.V.12.a through A.V.12.c below. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in sections A.V.12.a through A.V.12.c below.

    a. The permittee can conduct performance tests less often for a given pollutant if the performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, the permittee does not have to conduct a performance test for that pollutant for the next 2 years. The permittee must conduct a performance test during the third year and no more than 36 months after the previous performance test.

    b. If the boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, the permittee may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

    c. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

13. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(a)]

    The permittee shall conduct all performance tests according to 40 CFR Part 63, Sections 63.7(c), (d), (f), and (h). The permittee must develop a site-specific test plan according to

the requirements in 40 CFR Part 63, Section 63.7(c) if the permittee elects to demonstrate compliance through performance testing.

14. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(b)]

    The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD and in section A.V.6 above.

15. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(d)]

    The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and the permittee must demonstrate initial compliance and establish the operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

16. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(e)]

    The permittee may not conduct performance tests during periods of startup, shutdown or malfunction.

17. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(f)]

    The permittee must conduct three separate test runs for each performance test required in 40 CFR Part 63, Section 63.7520, as specified in 40 CFR Part 63, Section 63.7(e)(3). Each test run must last at least one hour.

18. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7520(g)]

    To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of Method 19 of 40 CFR Part 60, Appendix A to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

19. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(b)]

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

20. [OAC rule 3745-31-28 equivalent to 40 CFR Part 63, Subpart DDDDD, 63.7535(c)]

    The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P006 - Rotary Hearth Furnace 6 - pulverized coal-fired rotary hearth furnace controlled with selective catalytic reduction (SCR), baghouse, and lime spray dryer absorber and three hot briquetters

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P007 - No. 1 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through

5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P007 - No. 1 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P008 - No. 2 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through

5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P008 - No. 2 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P009 - No. 3 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through

5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P009 - No. 3 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P010- No. 4 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through

5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P010- No. 4 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P011- No. 5 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through

5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P011- No. 5 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P012- No. 6 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

   b. Emission Limitation:

   PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000

pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor

is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P012- No. 6 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P013- No. 7 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

   b. Emission Limitation:

   PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000

pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor

is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P013- No. 7 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P014- No. 8 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.10 pound per hour and 4.82 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.013 pound per hour and 0.057 ton per year as a rolling, 12-month summation. See section A.I.2.a and A.I.2.d below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 0.0017 pound per hour and 0.007 ton per year as a rolling, 12-month summation. See section A.I.2.b and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

2.c The permittee satisfies the "latest available control technologies and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirements to satisfy the "best available control technologies and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

II. Operational Restrictions

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

2. The emissions from emissions unit P007 shall be vented to Baghouse #15.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

   There shall be no visible particulate emissions from the stack serving this emissions unit.

   Applicable Compliance Method:

   If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

   b. Emission Limitation:

   PM/PM10 emissions shall not exceed 0.0017 pound per hour and 0.007 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr) and by (1 - 0.99) for control efficiency. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

CO emissions shall not exceed 1.85 pounds per hour and 8.10 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions shall not exceed 1.10 pound per hour and 4.82 tons per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 0.12 pound per hour and 0.53 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO2 emissions shall not exceed 0.013 pound per hour and 0.057 ton per year.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 0.6 lb of SO2/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.022 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grains/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000

pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

i. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

j. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor

is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

k. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P014- No. 8 natural gas fired tundish preheater vented to baghouse 15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P015 - Continuous caster of steel No. 1 (including the continuous caster, tundish turret, ladles, tundish dump station, ladle dump station, EAF furnace bottom tear out bricking station, and slag pot dumping) controlled by baghouse #15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-(10) thru (20)	PM emissions from baghouse 15 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.c below.
OAC rule 3745-31-(21) thru (27)	PM10 emissions from baghouse 15 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(E)(2)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.c The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grain/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

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 time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.
Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) 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 reporting requirements of the Part 1 - General Terms and Conditions of this permit under section (A)(1).

V. Testing Requirements

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

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

b. Emission Limitation:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grain/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (1.40 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The tpy emission limitation was developed by multiplying the short-term allowable SO_2 emission limitation (0.13 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable NO_X emission limitation (11.05 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (18.56 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

      PM Methods 1 through 5

   d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment -P015 - Continuous caster of steel No. 1 (including the continuous caster, tundish turret, ladles, tundish dump station, ladle dump station, EAF furnace bottom tear out bricking station, and slag pot dumping) controlled by baghouse #15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P016 - Continuous caster of steel No. 2 (including the continuous caster, tundish turret, ladles, tundish dump station, ladle dump station, EAF furnace bottom tear out bricking station, and slag pot dumping) controlled by baghouse #15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-(10) thru (20)	PM emissions from baghouse 15 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.c below.
OAC rule 3745-31-(21) thru (27)	PM10 emissions from baghouse 15 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-18-06(E)(2)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	rules 3745-31-(10) thru (20).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.c The emissions from emissions units P007 through P016 that vent to Baghouse #15 shall not exceed the following from the baghouse outlet:

PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grain/dscf and 6.13 tons per year;

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year;

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year;

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year;

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year.

The total emissions from Baghouse #15 include the emissions from the tundish preheaters (P007-P014), the continuous casters (P015-P016), and the ladle preheaters (exempt from permitting).

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 time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) 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 reporting requirements of the Part 1 - General Terms and Conditions of this permit under section (A)(1).

V. Testing Requirements

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

   a. Emission Limitation:

      There shall be no visible particulate emissions from the baghouse exhaust stack.

      Applicable Compliance Method:

      If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM/PM10 emissions shall not exceed 1.40 pounds per hour, 0.0022 grain/dscf and 6.13 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (1.40 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

SO2 emissions shall not exceed 0.13 pound per hour and 0.57 ton per year from the baghouse #15 outlet.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound SO_2 / mmscf of natural gas by the emission unit's that vent to baghouse #15 maximum hourly natural gas consumption rate (0.221 mmscf/hr). The SO_2 emission factor was obtained from AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The tpy emission limitation was developed by multiplying the short-term allowable SO_2 emission limitation (0.13 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

NOx emissions shall not exceed 11.05 pounds per hour and 48.40 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable NO_X emission limitation (11.05 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is

shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 18.56 pounds per hour and 81.29 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (18.56 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

VOC emissions shall not exceed 1.22 pounds per hour and 5.34 tons per year from the baghouse #15 outlet.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions units that vent to baghouse #15 maximum hourly natural gas firing rate (0.221 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse #15 (controlling emission units P007 through P016) in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emissions limits.

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

PM Methods 1 through 5

d. The test(s) shall be conducted while emissions units P007 through P016 are operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P016 - Continuous caster of steel No. 2 (including the continuous caster, tundish turret, ladles, tundish dump station, ladle dump station, EAF furnace bottom tear out bricking station, and slag pot dumping) controlled by baghouse #15

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P017 - RHF/HRSG cooling towers (7) with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 1.26 pounds per hour and 5.53 tons per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM_{10}) shall not exceed 1.26 pound per hour and 5.53 tons per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-(10) thru (20) and OAC rule 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM and PM_{10} emissions shall not exceed 1.26 pound per hour and 5.53 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P017 - RHF/HRSG cooling towers (7) with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P018 - Electric Arc Furnace (EAF) No. 1 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See sections A.I.2.d through A.I.2.g and A.II.2 and A.II.3 below. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and NSPS 40 CFR Part 60, Subpart AAa.
OAC rule 3745-31-05(C)	Pb emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-(10) thru (20)	Emissions from the EAF shall not exceed the following: Particulate matter (PM) emissions (EAF #1 and LMF #1 & #2) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Sulfur dioxide (SO2) emissions shall not exceed 33.0 pounds per hour and 110.23 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 102.30 pounds per hour and 341.72 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions (EAF #1 and LMF #1 & #2) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 22.44 pounds per hour and 74.96 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2. b below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM10) (EAF #1 and LMF #1 & #2) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart AAa.**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rule 3745-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**
40 CFR Part 60, Subpart AAa [40 CFR 60.272a(a)]	The particulate matter emission limitation required by this applicable rule is less stringent than the particulate matter emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27). The permittee shall not cause to be discharged into the atmosphere any gases which exit the #12 baghouse and exhibit 3 percent opacity or greater.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	The visible particulate emission limitations from the melt shop and dust handling system are less stringent than the visible particulate emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable + condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} , VOC, and Fluoride. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel

SO_2 - Use of an emission limitation of 0.13 lb/ton of steel

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel

Fluoride - Use of DEC exhausted to baghouse

CO - Use of DEC system with an emission limitation of 2.0 lb/ton of steel

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable).

2.d For scrap containing motor vehicle scrap, permittee shall procure the scrap pursuant to one of the options identified in paragraphs (b)(1),(2),or (3) of 40 CFR 63.10685. In addition, permittee shall install, operate, and maintain an activated lignite injection system that will control mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 8.75 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.e During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from electric arc furnace (EAF) steel manufacturing facilities. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on F facilities, (2) limited information is available concerning the effectiveness of the various control devices on this EAFs for mercury control, (3) there are limitations to data concerning the amount of mercury in the scrap steel that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by EAFs is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.f This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.g The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in

section A.I.2.d and/or the mercury monitoring requirements specified in section A.III.8. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that, for scrap containing motor vehicle scrap, compliance with one of the options identified in paragraphs (b)(1),(2) or (3) of 40 CFR 63.10685 is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 2,204,624 tons of steel, based upon a rolling, 12-month summation of the production rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Production (Tons)
1	183,719
1-2	367,438
1-3	551,157
1-4	734,876
1-5	918,595
1-6	1,102,314
1-7	1,286,033
1-8	1,469,752
1-9	1,653,471
1-10	1,837,190
1-11	2,020,909
1-12	2,204,624

   After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the steel production.

2. The permittee shall maintain a minimum activated lignite injection rate of 8.75 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section A.V.2, as long as no applicable mercury emission rates are exceeded. The mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

3. Prior to the operation of this emissions unit, the permittee shall submit a Scrap Management Plan (SMP) to the Portsmouth Local Air Agency for review and approval. The main focus of the SMP will be to ensure the purchase of scrap from suppliers that participate in the National Vehicle Mercury Switch Removal Program. The purchase of excessively oily scrap and other combustible material shall be minimized to the greatest

extent possible. All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. As part of the SMP, the permittee shall install a radionuclide detector which will be used to inspect all incoming scrap material into the facility. Radioactive scrap material shall not be used at this facility. Any scrap material which is determined to be radioactive shall be either returned to the supplier or disposed of in accordance with the Nuclear Regulatory Commission's (NRC) requirements.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2. The permittee shall identify the types of scrap received as mercury containing scrap or other scrap (including scrap from which mercury containing devices have been removed). The permittee shall record the weight of mercury containing scrap, in pounds, the weight of other scrap, in pounds, and the charge identification number, for each furnace charge, on a daily basis.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, ~~W~~ **w**ithin 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

5. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

6. The permittee shall maintain monthly records of the following information:

a. the production rate for each month; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

8. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

(Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

where:

E_h = Hg mass emissions for the hour, in lb(s);
K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

9. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

10. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

11. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

12. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

13. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.276a).

2. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each

exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;
ii. the manufacturer and model number of the continuous opacity monitor;
iii. the location of the continuous opacity monitor;
iv. the exceedance report as detailed in (a) above;
v. the total operating time (hours) of the emissions unit;
vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Air Quality Modeling and Planning
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

6. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

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

a. Emission Limitation:

Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

b. Emission Limitation:

Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

Applicable Compliance Method:

c. Emission Limitation:

PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall from not exceed 36.05 pounds per hour (filterable + condensable).
Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

d. Emission Limitation:

PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the EAF shall not exceed 33.0 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-6 of 0.10 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f.. Emission Limitation:

SO2 emissions from the EAF shall not exceed 110.23 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-6 of 0.10 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

g. Emission Limitation:

NOx emissions from the EAF shall not exceed 102.30 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-4 of ~~2~~ **0.31** lb~~s~~/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the EAF shall not exceed 341.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-4 of 0.31 lb~~s~~/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #1 and LMF #1 & #2 shall not exceed 660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #1 and LMF #1 & #2 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

k. Emission Limitation:

VOC emissions from the EAF shall not exceed 22.44 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-8 of 0.057 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the EAF shall not exceed 74.96 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-8 of 0.057 lb/hr plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

m. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere any gases which exit the #12 baghouse and exhibit 3 percent opacity or greater.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emission allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #12 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc. Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #12 outlet.

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Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, Pb, Hg, fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P018, P020 and P021 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	ASTM D6784-02, Standard Test Method for Elemental, Oxidized Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method); and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

3. See 40 CFR Part 60, Subpart AAa (40 CFR 60.275a).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P018 - Electric Arc Furnace (EAF) No. 1 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
ORC 3704.03(F)	**See sections B.III.1 through B.III.4 and B. IV.1 below.**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

The permit to install for this emissions unit (P018) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: manganese
TLV (mg/m3): 200
Maximum Hourly Emission Rate (lbs/hr): 0.35
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.085
MAGLC (ug/m3): 4.76

The permittee has demonstrated that emissions of manganese, from emissions unit P018, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

2. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification” or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

3. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

4. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

   The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

IV. Reporting Requirements

1. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

   The permittee shall submit annual reports to the Portsmouth Local Air Agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P019 - Electric Arc Furnace (EAF) No. 2 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P019, P022 and P023 that vent to the #12 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See sections A.I.2.d through A.I.2.g and A.II.2 and A.II.3 below. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and NSPS 40 CFR Part 60, Subpart AAa.
OAC rule 3745-31-05(C)	Pb emissions from emissions units P019, P022 and P023 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	**Applicable Emissions Limitations/Control Measures**
OAC rules 3745-31-(10) thru (20)	Emissions from the EAF shall not exceed the following: Particulate matter (PM) emissions (EAF #2 and LMF #3 & #4) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 33.0 pounds per hour and 110.23 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 102.30 pounds per hour and 341.72 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions (EAF #2 and LMF #3 & #4) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 22.44 pounds per hour and 74.96 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2. b below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM10) (EAF #2 and LMF #3 & #4) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart AAa.**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**
40 CFR Part 60, Subpart AAa [40 CFR 60.272a(a)]	The particulate matter emission limitation required by this applicable rule is less stringent than the particulate matter emission limitation established pursuant to OAC rules 3745-31-

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(10) thru (20) and OAC rules 3745-(21) thru (27). The permittee shall not cause to be discharged into the atmosphere any gases which exit the #14 baghouse and exhibit 3 percent opacity or greater. The visible particulate emission limitations from the melt shop and dust handling system are less stringent than the visible particulate emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable + condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel

SO_2 - Use of an emission limitation of 0.13 lb/ton of steel

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel

Fluoride - Use of DEC exhausted to baghouse

CO - Use of DEC system with an emission limitation of 2.0 lb/ton of steel

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

2.d For scrap containing motor vehicle scrap, permittee shall procure the scrap pursuant to one of the options identified in paragraphs (b)(1),(2),or (3) of 40 CFR 63.10685. In addition, permittee shall install, operate, and maintain an activated lignite injection system that will control mercury emissions. The activated lignite injection system shall be designed for a minimum activated lignite injection rate of 8.75 pounds of activated lignite per million actual cubic feet of exhaust gases at the point of injection.

2.e During the review of this permit, it became clear that there are significant uncertainties concerning the expected mercury emissions from electric arc furnace (EAF) steel manufacturing facilities. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on EAF facilities, (2) limited information is available concerning the effectiveness of the various control devices on this EAFs for mercury control, (3) there are limitations to data concerning the amount of mercury in the scrap steel that is expected to be used, and (4) the form of mercury (elemental, oxidized, and particle-bound) produced by EAFs is not fully understood.

Because of these significant uncertainties, NSI may request that the Director adjust the Best Available Technology (BAT) mercury emission limit after enough data has been collected to understand the expected emissions. NSI may petition the Director to change the limits once initial testing for mercury is complete and at least six months worth of data are collected via the mercury sorbent trap monitoring system or an alternate approved continuous emissions monitoring system based on an EPA promulgated instrumental reference method for mercury. The Director shall consider the information contained in the permittee's petition, but is not obligated to accept the permittee's recommended BAT mercury emission limits.

2.f This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with OAC rule 3745-31-05(C), the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.g The permittee may submit a request to Ohio EPA for the discontinuation of the activated lignite injection system for control of mercury emissions specified in section A.I.2.d and/or the mercury monitoring requirements specified in section A.III.8. Discontinuation of mercury control and/or mercury monitoring requirements shall require written approval from Ohio EPA. Approval of such a request shall depend upon conclusive evidence that, for scrap containing motor vehicle scrap, compliance with one of the options identified in paragraphs (b)(1),(2) or (3) of 40 CFR 63.10685 is adequate to ensure compliance with each mercury limit for this emissions unit.

II. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 2,204,624 tons of steel, based upon a rolling, 12-month summation of the production rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Production (Tons)
1	183,719
1-2	367,438
1-3	551,157
1-4	734,876
1-5	918,595
1-6	1,102,314
1-7	1,286,033
1-8	1,469,752
1-9	1,653,471
1-10	1,837,190
1-11	2,020,909
1-12	2,204,624

   After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the steel production.

2. The permittee shall maintain a minimum activated lignite injection rate of 8.75 lbs/mmacf. The permittee may request a reduced activated lignite injection rate for this emissions unit after mercury emission tests have been completed, using the test method specified in section B.V.2, as long as no applicable mercury emission rates are exceeded. The

mercury emission test(s) shall be witnessed by the Portsmouth Local Air Agency and any adjustment to the activated lignite injection rate is subject to written approval by Ohio EPA.

3. Prior to the operation of this emissions unit, the permittee shall submit a Scrap Management Plan (SMP) to the Portsmouth Local Air Agency for review and approval. The main focus of the SMP will be to ensure the purchase of scrap from suppliers that participate in the National Vehicle Mercury Switch Removal Program. The purchase of excessively oily scrap and other combustible material shall be minimized to the greatest extent possible. All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. As part of the SMP, the permittee shall install a radionuclide detector which will be used to inspect all incoming scrap material into the facility. Radioactive scrap material shall not be used at this facility. Any scrap material which is determined to be radioactive shall be either returned to the supplier or disposed of in accordance with the Nuclear Regulatory Commission's (NRC) requirements.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2. The permittee shall identify the types of scrap received as mercury containing scrap or other scrap (including scrap from which mercury containing devices have been removed). The permittee shall record the weight of mercury containing scrap, in pounds, the weight of other scrap, in pounds, and the charge identification number, for each furnace charge, on a daily basis.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

   If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, within 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

   If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-

site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

5. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

6. The permittee shall maintain monthly records of the following information:

a. the production rate for each month; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

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

   a. the color of the emissions;

   b. the total duration of any visible emission incident; and

   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

8. The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40 CFR Part 75.15 and the following requirements.

   a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

   b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, C_h in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

   (Equation 1) $$E_h = K\, C_h\, Q_h\, t_h\, (1-B_{ws})$$

   where:

   E_h = Hg mass emissions for the hour, in lb(s);

K = units conversion constant, 6.24×10^{-11} lb-scm/µg-scf;
C_h = hourly mercury concentration, dry basis, in µg/dscm;
Q_h = hourly stack gas volumetric flow rate, in scfh;
t_h = unit operating time, i.e., the fraction of the hour for which the unit operated; and
B_{ws} = stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H_2O, B_{ws} = 0.08).

(Equation 2) $$M = \sum_{h=1}^{n} E_h$$

where:

M = total Hg mass emissions for the month;
E_h = Hg mass emissions for hour "h", from Equation 1, in lb(s); and
n = the number of unit operating hours in the month with valid sorbent trap monitoring system data.

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.

d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75, and all other quality assurance requirements specified in appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

9. The permittee may not use mercury continuous emissions sampling system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

10. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

11. Prior to startup, the permittee shall prepare and submit to the Portsmouth Local Air Agency and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below:

    a. installation of the sorbent trap monitoring system 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., at or downstream of the last control device);

    b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

    c. performance evaluation procedures and acceptance criteria (e.g., calibrations);

    d. ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75;

    e. ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR Part 75; and

    f. ongoing record keeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da.

12. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from electric arc furnaces in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

13. The permittee shall install equipment to continuously monitor and record the activated lignite injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust gases.

    The permittee shall also maintain daily records of the manufacturer and manufacturer's identification of the activated lignite used in the activated lignite injection system.

IV. Reporting Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.276a).

2. [40 CFR 60.7]

   The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and

the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;
ii. the manufacturer and model number of the continuous opacity monitor;
iii. the location of the continuous opacity monitor;
iv. the exceedance report as detailed in (a) above;
v. the total operating time (hours) of the emissions unit;
vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation, and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

   a. construction date (no later than 30 days after such date);
   b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
   c. actual start-up date (within 15 days after such date); and
   d. date of performance testing (If required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Air Quality Modeling and Planning
   Lazarus Government Center
   P.O. Box 1049
   Columbus, OH 43216-1049

   and

   Portsmouth Local Air Agency
   605 Washington Street, Third Floor
   Portsmouth, Ohio 45662

6. Reporting Requirements for Hg Sorbent Trap Monitoring System

   The permittee shall submit quarterly reports to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling, 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

   The permittee shall submit reports to the Portsmouth Local Air Agency documenting any Hg sorbent trap 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 sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system 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 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

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

a. Emission Limitation:

Pb emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

b. Emission Limitation:

Pb emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

c. Emission Limitation:

PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall from not exceed 36.05 pounds per hour (filterable + condensable).
Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

d. Emission Limitation:

PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341

acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the EAF shall not exceed 33.0 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-6 of 0.10 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f. Emission Limitation:

SO2 emissions from the EAF shall not exceed 110.23 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-6 of 0.10 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

g. Emission Limitation:

NOx emissions from the EAF shall not exceed 102.30 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-4 of 0.31 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the EAF shall not exceed 341.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-4 of 0.31 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #2 and LMF #3 & #4 shall not exceed 660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #2 and LMF #3 & #4 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

k. Emission Limitation:

VOC emissions from the EAF shall not exceed 22.44 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-8 of 0.057 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the EAF shall not exceed 74.96 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF from AP-42, Section 12.5, Table 12.5.1-8 of

0.057 lb/ton plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

m. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere any gases which exit the #14 baghouse and exhibit 3 percent opacity or greater.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #14 outlet.

Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emissions allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #14 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc. Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, Pb, Hg, fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P019, P022 and P023 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	ASTM D6784-02, Standard Test Method for Elemental, Oxidized Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method); and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

3. See 40 CFR Part 60, Subpart AAa (40 CFR 60.275a).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P019 - Electric Arc Furnace (EAF) No. 2 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
ORC 3704.03(F)	**See sections B.III.1 through B.III.4 and B. IV.1 below.**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

The permit to install for this emissions unit (P018) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: manganese
TLV (mg/m3): 200
Maximum Hourly Emission Rate (lbs/hr): 0.35
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.085
MAGLC (ug/m3): 4.76

The permittee has demonstrated that emissions of manganese, from emissions unit P018, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

2. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification” or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

3. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

4. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

IV. Reporting Requirements

1. [ORC 3704.03(F)(3)(c) and F(4) and OAC rule 3745-114-01]

   The permittee shall submit annual reports to the Portsmouth Local Air Agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P020 - LMF - Ladle Metallurgy Furnace No. 1 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See section A.I.2.b below. Visible particulate emissions from the stack serving this emissions unit shall not exceed 3% opacity, as a 6-minute average. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-05(C)	Pb emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-(10) thru (20)	Emissions from the LMF shall not exceed the following: Particulate matter (PM) emissions (EAF #1 and LMF #1 & #2) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 11.55 pounds per hour and 38.58 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.63 pounds per hour and 12.13 tons per year as a rolling, 12-summation Carbon monoxide (CO) emissions (EAF #1 and LMF #1 & #2) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 1.57 pounds per hour and 5.24 tons per year as a rolling, 12-summation. See sections A.I.2.a and A.I.2.c below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM-10) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**

2. Additional Terms and Conditions

2.a The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable + condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b Mercury emissions shall be controlled by using the baghouse and by restricting the amount of mercury containing scrap used in the process. For purposes of this permit to install, "mercury containing scrap" is defined as #2 bundles or shredded (frag) scrap consisting in part of either automobile or white goods scrap obtained from a source where the readily accessible mercury containing devices have not been removed prior to crushing or shredding.

2.c The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable);

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel;

SO_2 - Use of an emission limitation of 0.13 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel;

Fluoride - Use of DEC exhausted to baghouse;

CO - Use of DEC system with an emission limitation of 2.0 lbs/ton of steel.

2.d The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER

requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

II. Operational Restrictions

1. The emissions from emissions unit P020 shall be vented to baghouse #12.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2 [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, within 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;
ii. the manufacturer and model number of the continuous opacity monitor;
iii. the location of the continuous opacity monitor;
iv. the exceedance report as detailed in (a) above;
v. the total operating time (hours) of the emissions unit;
vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

      Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour.

      Applicable Compliance Method:

      Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

   b. Emission Limitation:

      Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.21 ton per year.

      Applicable Compliance Method:

      Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

   c. Emission Limitation:

      PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall from not exceed 36.05 pounds per hour (filterable + condensable).
      Applicable Compliance Method:

      Compliance shall be based upon the results of the emission testing specified in section A.V.2.

   d. Emission Limitation:

      PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the LMF shall not exceed 11.55 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f. Emission Limitation:

SO2 emissions from the LMF shall not exceed 38.58 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

g. Emission Limitation:

NOx emissions from the LMF shall not exceed 3.63 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the LMF shall not exceed 12.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #1 and LMF #1 & #2 shall not exceed 660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #1 and LMF #1 & #2 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

k. Emission Limitation:

VOC emissions from the LMF shall not exceed 1.57 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of 0.00396 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the LMF shall not exceed 5.24 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of

0.00396 lb/ton plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

m. Emission Limitation:

Visible particulate emissions shall not exceed 3% opacity as a 6-minute average from the baghouse stack.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emissions allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #12 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #12 outlet.

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Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, lead (Pb), mercury (Hg), fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P018, P020 and P021 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a for emissions unit P018 unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A; and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P020 - LMF - Ladle Metallurgy Furnace No. 1 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P021 - LMF - Ladle Metallurgy Furnace No. 2 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See section A.I.2.b below. Visible particulate emissions from the stack serving this emissions unit shall not exceed 3% opacity, as a 6-minute average. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-05(C)	Pb emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-(10) thru (20)	Emissions from the LMF shall not exceed the following: Particulate matter (PM) emissions (EAF #1 and LMF #1 & #2) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 11.55 pounds per hour and 38.58 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.63 pounds per hour and 12.13 tons per year as a rolling, 12-summation Carbon monoxide (CO) emissions (EAF #1 and LMF #1 & #2) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 1.57 pounds per hour and 5.24 tons per year as a rolling, 12-summation. See sections A.I.2.a and A.I.2.c below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM-10) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**

2. Additional Terms and Conditions

2.a The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable + condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b Mercury emissions shall be controlled by using the baghouse and by restricting the amount of mercury containing scrap used in the process. For purposes of this permit to install, "mercury containing scrap" is defined as #2 bundles or shredded (frag) scrap consisting in part of either automobile or white goods scrap obtained from a source where the readily accessible mercury containing devices have not been removed prior to crushing or shredding.

2.c The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable);

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel;

SO_2 - Use of an emission limitation of 0.13 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel;

Fluoride - Use of DEC exhausted to baghouse; and

CO - Use of DEC system with an emission limitation of 2.0 lb/ton of steel.

2.d The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER

requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

II. Operational Restrictions

1. The emissions from emissions unit P021 shall be vented to baghouse #12.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, within 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;
ii. the manufacturer and model number of the continuous opacity monitor;
iii. the location of the continuous opacity monitor;
iv. the exceedance report as detailed in (a) above;
v. the total operating time (hours) of the emissions unit;
vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

      Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour.

      Applicable Compliance Method:

      Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

   b. Emission Limitation:

      Pb emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.21 ton per year.

      Applicable Compliance Method:

      Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

   c. Emission Limitation:

      PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall from not exceed 36.05 pounds per hour (filterable + condensable).
      Applicable Compliance Method:

      Compliance shall be based upon the results of the emission testing specified in section A.V.2.

   d. Emission Limitation:

      PM and PM10 emissions from the EAF #1 and LMF #1 & #2 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the LMF shall not exceed 11.55 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f. Emission Limitation:

SO2 emissions from the LMF shall not exceed 38.58 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

g. Emission Limitation:

NOx emissions from the LMF shall not exceed 3.63 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the LMF shall not exceed 12.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #1 and LMF #1 & #2 shall not exceed
660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #1 and LMF #1 & #2 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

k. Emission Limitation:

VOC emissions from the LMF shall not exceed ~~22.44~~ **1.57** pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of 0.00396 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the LMF shall not exceed 5.24 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of

0.00396 lb/ton plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

m. Emission Limitation:

Visible particulate emissions shall not exceed 3% opacity as a 6-minute average from the baghouse stack.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #12 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #12 outlet.

Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emissions allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #12 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #12 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #12 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, lead (Pb), mercury (Hg), fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P018, P020 and P021 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a for emissions unit P018 unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A; and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P021 - LMF - Ladle Metallurgy Furnace No. 2 with direct evacuation control (DEC) for capture vented to baghouse #12

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P022 - LMF - Ladle Metallurgy Furnace No. 3 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See section A.I.2.b below. Visible particulate emissions from the stack serving this emissions unit shall not exceed 3% opacity, as a 6-minute average. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-05(C)	Pb emissions from emissions units P019, P022 and P023 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-(10) thru (20)	Emissions from the LMF shall not exceed the following: Particulate matter (PM) emissions (EAF #2 and LMF #3 & #4) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 11.55 pounds per hour and 38.58 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.63 pounds per hour and 12.13 tons per year as a rolling, 12-summation Carbon monoxide (CO) emissions (EAF #2 and LMF #3 & #4) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 1.57 pounds per hour and 5.24 tons per year as a rolling, 12-summation. See sections A.I.2.a and A.I.2.c below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM-10) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**

2. Additional Terms and Conditions

2.a The emissions from emissions units P019, P022 and P023 that vent to the #14 Baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable + condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b Mercury emissions shall be controlled by using the baghouse and by restricting the amount of mercury containing scrap used in the process. For purposes of this permit to install, "mercury containing scrap" is defined as #2 bundles or shredded (frag) scrap consisting in part of either automobile or white goods scrap obtained from a source where the readily accessible mercury containing devices have not been removed prior to crushing or shredding.

2.c The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable);

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel;

SO_2 - Use of an emission factor of 0.13 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel;

Fluoride - Use of DEC exhausted to baghouse;

CO - Use of DEC system with an emission limitation of 2.0 lb/ton of steel.

2.d The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

II. Operational Restrictions

1. The emissions from emissions unit P022 shall be vented to baghouse #14.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, within 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. [40 CFR 60.7]

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;
ii. the manufacturer and model number of the continuous opacity monitor;
iii. the location of the continuous opacity monitor;
iv. the exceedance report as detailed in (a) above;
v. the total operating time (hours) of the emissions unit;
vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   Lead (Pb) emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound per hour.

   Applicable Compliance Method:

   Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

   b. Emission Limitation:

   Pb emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.21 ton per year.

   Applicable Compliance Method:

   Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

   c. Emission Limitation:

   PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall from not exceed 36.05 pounds per hour (filterable + condensable).

   Applicable Compliance Method:

   Compliance shall be based upon the results of the emission testing specified in section A.V.2.

d. Emission Limitation:

PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the LMF shall not exceed 11.55 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f. Emission Limitation:

SO2 emissions from the LMF shall not exceed 38.58 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

g. Emission Limitation:

NOx emissions from the LMF shall not exceed 3.63 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the LMF shall not exceed 12.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #2 and LMF #3 & #4 shall not exceed
660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #2 and LMF #3 & #4 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

k. Emission Limitation:

VOC emissions from the LMF shall not exceed 1.57 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of 0.00396 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the LMF shall not exceed 5.24 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of 0.00396 lb/ton plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

m. Emission Limitation:

Visible particulate emissions shall not exceed 3% opacity as a 6-minute average from the baghouse stack.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #14 outlet.

Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emissions allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #14 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #14 outlet.

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Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, lead (Pb), mercury (Hg), fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P018, P020 and P021 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a for emissions unit P019 unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A; and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P022 - LMF - Ladle Metallurgy Furnace No. 3 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P023 - LMF - Ladle Metallurgy Furnace No. 4 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following: Lead (Pb) emissions shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.0066 pound per hour and 44.00 pounds per rolling, 12-month period. Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period. See section A.I.2.b below. Visible particulate emissions from the stack serving this emissions unit shall not exceed 3% opacity, as a 6-minute average. There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-31-05(C)	Pb emissions from emissions units P019, P022 and P023 that vent to the #12 baghouse shall not exceed 0.21 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-(10) thru (20)	Emissions from the LMF shall not exceed the following: Particulate matter (PM) emissions (EAF #2 and LMF #3 & #4) (filterable + condensable) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 11.55 pounds per hour and 38.58 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.63 pounds per hour and 12.13 tons per year as a rolling, 12-summation Carbon monoxide (CO) emissions (EAF #2 and LMF #3 & #4) shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 1.57 pounds per hour and 5.24 tons per year as a rolling, 12-summation. See sections A.I.2.a and A.I.2.c below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM-10) shall not exceed 36.05 pounds per hour and 136.63 tons per year as a rolling, 12-month summation. See sections A.I.2.a and A.I.2.d below.
OAC rule 3745-17-07(A)(1)	**The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).**
OAC rule 3745-18-06(E)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).**

2. Additional Terms and Conditions

2.a The emissions from emissions units P019, P022 and P023 that vent to the #14 Baghouse shall not exceed the following:

PM and PM10 emissions shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only), 0.0032 grain/dscf (filterable +

condensable) and 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation;

SO2 emissions shall not exceed 44.55 pounds per hour and 148.81 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 105.93 pounds per hour and 353.85 tons per year as a rolling, 12-month summation;

CO emissions shall not exceed 660.0 pounds per hour and 2,204.62 tons per year as a rolling, 12-month summation; and

VOC emissions shall not exceed 24.01 pounds per hour and 80.20 tons per year as a rolling, 12-month summation.

Fluoride emissions shall not exceed 24.75 pounds per hour and 82.67 tons per year as a rolling, 12-month summation.

2.b Mercury emissions shall be controlled by using the baghouse and by restricting the amount of mercury containing scrap used in the process. For purposes of this permit to install, "mercury containing scrap" is defined as #2 bundles or shredded (frag) scrap consisting in part of either automobile or white goods scrap obtained from a source where the readily accessible mercury containing devices have not been removed prior to crushing or shredding.

2.c The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM/PM_{10} and VOC. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above. The following determinations have been made for this emissions unit:

PM/PM10- Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable);

NOx- Use of DEC system and low NOx oxy-fuel burners with an emission limitation of 0.321 lb/ton of steel;

SO_2 - Use of an emission factor of 0.13 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.072 lb/ton of steel;

Fluoride - Use of DEC exhausted to baghouse;

CO - Use of DEC system with an emission limitation of 2.0 lb/ton of steel.

2.d The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. The following determinations have been made for this emissions unit:

PM_{10} - Use of DEC exhausted to a baghouse with an emission limitation of 0.0014 gr/dscf of exhaust gases (filterable only) and 0.0032 gr/dscf of exhaust gases (filterable + condensable)

II. Operational Restrictions

1. The emissions from emissions unit P023 shall be vented to baghouse #14.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 60, Subpart AAa (40 CFR 60.273a, 60.274a and 60.276a).

2. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, within 180 days of the of startup of this emissions unit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60. The plan shall include, at a minimum, procedures for 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 Performance Specification 1 is 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.

3. [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous opacity monitoring system meets the requirements of Performance Specification 1. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Portsmouth Local Air Agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers and data processing hardware and software.

4. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

If the permittee elects to install a continuous opacity monitoring system pursuant to 40 CFR 60.273a, the permittee shall install, operate and maintain a continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit in units of the applicable standard. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; and

f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

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

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. [40 CFR 60.7]

   The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system (if elected to install pursuant to 40 CFR 60.273a):

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. If there are no exceedances during the calendar quarter, the permittee shall submit a statement to that effect.

   b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

      i. the facility name and address;
      ii. the manufacturer and model number of the continuous opacity monitor;
      iii. the location of the continuous opacity monitor;
      iv. the exceedance report as detailed in (a) above;
      v. the total operating time (hours) of the emissions unit;
      vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
      vii. the date, time, and duration of any/each malfunction* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
      viii. the date, time, and duration of any downtime* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
      ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

      Each report shall address the operations conducted and data obtained during the previous calendar quarter.

      * each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports

shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

      Lead (Pb) emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound per hour.

      Applicable Compliance Method:

      Compliance with this emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

   b. Emission Limitation:

      Pb emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.21 ton per year.

      Applicable Compliance Method:

      Compliance with this annual emission limitation may be determined through the use of the emission factor provided by the company based on similar source stack test data of 0.00019 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

   c. Emission Limitation:

      PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall from not exceed 36.05 pounds per hour (filterable + condensable).
      Applicable Compliance Method:

      Compliance shall be based upon the results of the emission testing specified in section A.V.2.

   d. Emission Limitation:

      PM and PM10 emissions from the EAF #2 and LMF #3 & #4 shall not exceed 136.63 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

e. Emission Limitation:

SO2 emissions from the LMF shall not exceed 11.55 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

f. Emission Limitation:

SO2 emissions from the LMF shall not exceed 38.58 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-6 of 0.035 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

g. Emission Limitation:

NOx emissions from the LMF shall not exceed 3.63 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

NOx emissions from the LMF shall not exceed 12.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-4 of 0.011 lb/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

i. Emission Limitation:

CO emissions from EAF #2 and LMF #3 & #4 shall not exceed 660.0 pounds per hour.

Compliance with this emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. Emission Limitation:

CO emissions from the EAF #2 and LMF #3 & #4 shall not exceed 2,204.62 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the EAF & LMF from AP-42, Section 12.5, Table 12.5.1-5 of 2 lbs/ton multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of 2000 lbs/ton.

k. Emission Limitation:

VOC emissions from the LMF shall not exceed 1.57 pounds per hour.

Applicable Compliance Method:

Compliance with this emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of 0.00396 lb/ton plus a 20% safety factor multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour) .

l. Emission Limitation:

VOC emissions from the LMF shall not exceed 5.24 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with this annual emission limitation may be determined through the use of the emission factor for the LMF from AP-42, Section 12.5, Table 12.5.1-8 of

0.00396 lb/ton plus a 20% safety factor multiplied by the actual annual steel process rate of the emissions unit (in tons/year) and dividing by the factor of (2000 lbs/ton).

m. Emission Limitation:

Visible particulate emissions shall not exceed 3% opacity as a 6-minute average from the baghouse stack.

Applicable Compliance Method:

If required, 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)(1).

n. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 36.05 pounds per hour (filterable + condensable), 0.0014 grain/dscf (filterable only) and 0.0032 grain/dscf (filterable + condensable).

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

o. Emission Limitation:

PM and PM10 emissions from baghouse #14 shall not exceed 136.63 tons per year (filterable + condensable) as a rolling, 12-month summation.

Applicable Compliance Method:

The ton per year limitation was developed by multiplying the baghouse filterable PM emission limit of 0.0014 gr/dscf by the maximum baghouse flow rate of 1,299,341 acfm times 60 min/hr divided by 7000 grains per pound multiplied by 8760 hours per year divided by 2000 pounds/ton and multiplying the 0.062 lb/ton condensable PM emission factor by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emissions factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

p. Emission Limitation:

SO2 emissions shall not exceed 44.55 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

q. Emission Limitation:

SO2 emissions shall not exceed 148.81 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr SO2 emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

r. Emission Limitation:

NOx emissions shall not exceed 105.93 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

s. Emission Limitation:

NOx emissions shall not exceed 353.85 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr NOx emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

t. Emission Limitation:

CO emissions shall not exceed 660.0 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

u. Emission Limitation:

CO emissions shall not exceed 2,204.62 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr CO emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

v. Emission Limitation:

VOC emissions shall not exceed 24.01 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

w. Emission Limitation:

VOC emissions shall not exceed 80.20 tons per year as a rolling, 12-month summation from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr VOC emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

x. Emission Limitation:

Pb emissions shall not exceed 0.06 pound per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

y. Emission Limitation:

Pb emissions shall not exceed 0.21 ton per year from the baghouse #14 outlet.

Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr Pb emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

z. Emission Limitation:

There shall be no visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit except for one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible fugitive particulate emission limitation for this emissions unit 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”).

aa. Emission Limitation:

Hg emissions shall not exceed 0.0066 pound per hour from the baghouse #14 outlet.
Applicable Compliance Method:

The emission factor for Hg was developed based upon known testing and emissions allowables of other sources. An emission factor of 0.0004 lb Hg/ton of steel was used for determining the allowable hourly emission rate as follows: 330 tons/hr x 0.0004 lb Hg/ton = 0.132 lb Hg/hr x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 0.0066 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

bb. Emission Limitation:

Hg emissions shall not exceed 44.0 pounds per rolling, 12-month period from the baghouse #14 outlet.

Hg emissions from all RHF/boilers and all EAF/LMF, combined, shall not exceed 100 pounds per rolling, 12-month period.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual Hg emissions. This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton as follows: 2,204,624 tons/yr x 0.0004 lb Hg/ton x ton/2000 lbs = 0.44 ton Hg/yr x 2000 lbs/ton x 0.50 (50% control efficiency via mercury switch removal program) x 0.10 (90% control efficiency via lignite injection) = 44.0 lbs Hg/yr. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed and divide by 2000 lbs/ton.

cc Emission Limitation:

Fluoride emissions shall not exceed 24.75 pounds per hour from the baghouse #14 outlet.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

dd. Emission Limitation:

Fluoride emissions shall not exceed 82.67 tons per year from the baghouse #14 outlet.

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Applicable Compliance Method:

The ton per year limitation was developed by dividing the lb/hr fluoride emission rate established through the emission testing requirement in section A.V.2 by the maximum process rate of the emissions unit (330 tons/hr). This lb/ton emission factor is multiplied by the annual production rate restriction (2,204,624 tons of steel production) and divided by the factor of 2000 pounds/ton. Compliance shall be determined by multiplying the emission factor from the most recent stack test which demonstrated compliance by the actual annual amount of steel processed.

2. Emission testing shall be conducted within 60 days of achieving maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up of the facility. The emission testing shall be conducted to demonstrate compliance with the SO2, NOx, CO, VOC, lead (Pb), mercury (Hg), fluoride and particulate emission limitations.

The test(s) shall be conducted while emissions units P018, P020 and P021 are operating simultaneously at or near their maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency. The tests shall be conducted in accordance with the requirements of 40 CFR Part 60.275a.

If the permittee has chosen to install a furnace static pressure monitoring device to satisfy the emission monitoring requirements of 40 CFR 60.273a, the permittee shall obtain the following additional information during the particulate emission test:

a. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required under 40 CFR 60.273a for emissions unit P019 unless alternative monitoring is approved by U.S. EPA; and

b. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

The following test methods shall be employed to demonstrate compliance with the emission limitations:

PM/PM10	Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M;
SO2	Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A;
NOx	Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
VOC	Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A;
Pb	Methods 1 through 4 and 12 or 29 of 40 CFR Part 60, Appendix A;
Hg	Methods 1 through 4 and 29 of 40 CFR Part 60, Appendix A; and
Fluoride	Methods 1 through 4 and 13B of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P023 - LMF - Ladle Metallurgy Furnace No. 4 with direct evacuation control (DEC) for capture vented to baghouse #14

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P024 - Melt shop cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.66 pound per hour and 2.89 tons per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) shall not exceed 0.66 pound per hour and 2.89 tons per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM and PM_{10} emissions shall not exceed 0.66 pound per hour and 2.89 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P024 - Melt shop cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P025 - Vacuum Oxygen Degasser (VOD) No. 1 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period. See section A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions of particulate matter of less than 10 microns (PM_{10}) from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	The visible emission limitation required by this applicable rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-21-08(B)	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. It has been determined that the use of natural gas as fuel, a flare with a 99% control efficiency and acceptance of a NOx emission limitation of 100 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit.

2.c The flare shall meet the design requirements specified in 40 CFR Part 60.18.

2.d The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall operate the flare system with the presence of a flame during oxygen injection only.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain a device to continuously monitor the flame presence when the emissions unit is in operation during the oxygen lansing degassing process. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

2. The permittee shall record the following information each day:

   a. all periods during which the flame presence sensor was inoperable; and

   b. the operating times for the flare, monitoring equipment and the emissions unit during the oxygen lansing degassing process.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flame presence sensor was not functioning properly. The reports shall include the date, time and duration of each such period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period.

   Applicable Compliance Method:

   Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

   PM and PM_{10} emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

   The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.12 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:

   CO emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, the CO generated by the flare shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the flare's maximum

hourly natural gas firing rate (0.016 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with the hourly emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(660 tons/hr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100) * (2000 lbs/ton)] + [(84 lbs/mmcf) * 0.016 mmcf/hr)] = 1.87 lbs/hr

Compliance with the annual emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(4,409,248 tons/yr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100)] + [(84 lbs/mmcf) * (140 mmcf/yr) / (2000 lbs/ton)] = 7.76 tons/yr

d. Emission Limitation:

NOx emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the maximum flare short-term allowable NOx emission limitation (1.60 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P025 - Vacuum Oxygen Degasser (VOD) No. 1 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P026 - Vacuum Oxygen Degasser (VOD) No. 2 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period. See section A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions of particulate matter of less than 10 microns (PM_{10}) from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	The visible emission limitation required by this applicable rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-21-08(B)	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. It has been determined that the use of natural gas as fuel, a flare with a 99% control efficiency and acceptance of a NOx emission limitation of 100 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The flare shall meet the design requirements specified in 40 CFR Part 60.18.

2.d The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall operate the flare system with the presence of a flame during oxygen injection only.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain a device to continuously monitor the flame presence when the emissions unit is in operation during the oxygen lansing degassing process. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

2. The permittee shall record the following information each day:

   a. all periods during which the flame presence sensor was inoperable; and

   b. the operating times for the flare, monitoring equipment and the emissions unit during the oxygen lansing degassing process.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flame presence sensor was not functioning properly. The reports shall include the date, time and duration of each such period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period.

   Applicable Compliance Method:

   Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

   PM and PM_{10} emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

   The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.12 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:

   CO emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, the CO generated by the flare shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.016 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with the hourly emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(660 tons/hr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100) * (2000 lbs/ton)] + [(84 lbs/mmcf) * 0.016 mmcf/hr)] = 1.87 lbs/hr

Compliance with the annual emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(4,409,248 tons/yr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100)] + [(84 lbs/mmcf) * (140 mmcf/yr) / (2000 lbs/ton)] = 7.76 tons/yr

d. Emission Limitation:

NOx emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the maximum flare short-term allowable NOx emission limitation (1.60 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P026 - Vacuum Oxygen Degasser (VOD) No. 2 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P027 - Vacuum Oxygen Degasser (VOD) No. 3 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period. **See section A.I.2.c below.** The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions of particulate matter of less than 10 microns (PM_{10}) from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	The visible emission limitation required by this applicable rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-21-08(B)	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. It has been determined that the use of natural gas as fuel, a flare with a 99% control efficiency and acceptance of a NOx emission limitation of 100 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The flare shall meet the design requirements specified in 40 CFR Part 60.18.

2.d The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall operate the flare system with the presence of a flame during oxygen injection only.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain a device to continuously monitor the flame presence when the emissions unit is in operation during the oxygen lansing degassing process. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

2. The permittee shall record the following information each day:

   a. all periods during which the flame presence sensor was inoperable; and

   b. the operating times for the flare, monitoring equipment and the emissions unit during the oxygen lansing degassing process.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flame presence sensor was not functioning properly. The reports shall include the date, time and duration of each such period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period.

   Applicable Compliance Method:

   Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

   PM and PM_{10} emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

   The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.12 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:

   CO emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, the CO generated by the flare shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the flare's maximum

hourly natural gas firing rate (0.016 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with the hourly emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(660 tons/hr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100) * (2000 lbs/ton)] + [(84 lbs/mmcf) * 0.016 mmcf/hr)] = 1.87 lbs/hr

Compliance with the annual emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(4,409,248 tons/yr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100)] + [(84 lbs/mmcf) * (140 mmcf/yr) / (2000 lbs/ton)] = 7.76 tons/yr

d. Emission Limitation:

NOx emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

NOx emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the maximum flare short-term allowable NOx emission limitation (1.60 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P027 - Vacuum Oxygen Degasser (VOD) No. 3 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P028 - Vacuum Oxygen Degasser (VOD) No. 4 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period. **See section A.I.2.c below.** The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-(21) thru (27)	Emissions of particulate matter of less than 10 microns (PM_{10}) from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	The visible emission limitation required by this applicable rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rule 3745-21-08(B)	See section A.I.2.d below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10} and VOC. It has been determined that the use of natural gas as fuel, a flare with a 99% control efficiency and acceptance of a NOx emission limitation of 100 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The flare shall meet the design requirements specified in 40 CFR Part 60.18.

2.d The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The permittee shall operate the flare system with the presence of a flame during oxygen injection only.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain a device to continuously monitor the flame presence when the emissions unit is in operation during the oxygen lansing degassing process. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

2. The permittee shall record the following information each day:

   a. all periods during which the flame presence sensor was inoperable; and

   b. the operating times for the flare, monitoring equipment and the emissions unit during the oxygen lansing degassing process.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flame presence sensor was not functioning properly. The reports shall include the date, time and duration of each such period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   There shall be no visible particulate emissions from the flare serving this emissions unit except for one minute in any 60-minute observation period.

   Applicable Compliance Method:

   Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

   PM and PM_{10} emissions from the flare controlling emissions units P025, P026, P027 and P028 shall not exceed 0.12 pound per hour and 0.53 ton per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

   The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.12 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

   c. Emission Limitation:

   CO emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.87 pounds per hour and 7.76 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   When firing natural gas, the CO generated by the flare shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the flare's maximum

hourly natural gas firing rate (0.016 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with the hourly emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(660 tons/hr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100) * (2000 lbs/ton)] + [(84 lbs/mmcf) * 0.016 mmcf/hr)] = 1.87 lbs/hr

Compliance with the annual emission limitation can be determined by the use of the calculation below assuming the steel in the vacuum degassers contains approximately 0.04% carbon and 90% of the carbon monoxide is converted to carbon dioxide and 99% control by the flare in addition to the emissions from the flare combustion emissions referenced above.

[(4,409,248 tons/yr) * (0.04 %/100) * (1 - 90/100) * (1 - 99/100)] + [(84 lbs/mmcf) * (140 mmcf/yr) / (2000 lbs/ton)] = 7.76 tons/yr

d. Emission Limitation:

NOx emissions from the flare controlling emission units P025, P026, P027 and P028 shall not exceed 1.60 pounds per hour and 7.01 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the flare's maximum hourly natural gas firing rate (0.02 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The tpy emission limitation was developed by multiplying the maximum flare short-term allowable NOx emission limitation (1.60 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P028 - Vacuum Oxygen Degasser (VOD) No. 4 controlled by a flare

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P029 - No. 1 natural gas fired tunnel furnace

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 13.09 pounds per hour, 0.07 lb/mmBtu and 57.33 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 15.71 pounds per hour and 68.81 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 1.03 pounds per hour and 4.51 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.11 pound per hour and 0.48 ton per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru(27).
OAC rule 3745-18-06(E)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, Low-NOx burners, and acceptance of a NOx emission limitation of 70 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM/PM10 emissions shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the emission factor of 7.6 pounds PM/PM10 / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The PM/PM10 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

      The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NO_x emissions shall not exceed 13.09 pounds per hour, 0.07 lb/MMBtu, and 57.33 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation above based upon the results of the emission testing conducted in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions shall not exceed 15.71 pounds per hour and 68.81 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based upon the results of the emission testing conducted in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 1.03 pounds per hour and 4.51 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 5.5 pounds VOC / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The VOC emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000

pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO_2 emissions shall not exceed 0.11 pound per hour and 0.48 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound V SO_2 / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the NOx and CO emission limits.

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

NOx	Methods 1 through 4 and 7E
CO	Methods 1 through 4 and 10

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P029 - No. 1 natural gas fired tunnel furnace

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - *P030 - No. 2 natural gas fired tunnel furnace*

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and OAC rule 3745-21-08.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 13.09 pounds per hour, 0.07 lb/mmBtu and57.33 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 15.71 pounds per hour and 68.81 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 1.03 pounds per hour and 4.51 tons per year as a rolling, 12-month summation. Sulfur dioxide (SO_2) emissions shall not exceed 0.11 pound per hour and 0.48 ton per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions less than 10 microns (PM10) shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru(27).
OAC rule 3745-18-06(E)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20).
OAC rule 3745-21-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, Low-NOx burners, and acceptance of a NOx emission limitation of 70 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit:

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM/PM10 emissions shall not exceed 1.43 pounds per hour and 6.26 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the emission factor of 7.6 pounds PM/PM10 / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The PM/PM10 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

      The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NO_x emissions shall not exceed13.09 pounds per hour, 0.07 lb/MMBtu, and 57.33 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation above based upon the results of the emission testing conducted in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions shall not exceed 15.71 pounds per hour and 68.81 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based upon the results of the emission testing conducted in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions shall not exceed 1.03 pounds per hour and 4.51 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 5.5 pounds VOC / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The VOC emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000

pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

SO_2 emissions shall not exceed 0.11 pound per hour and 0.48 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.6 pound V SO_2 / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.187 mmscf/hr). The SO_2 emission factor was obtained from draft AP-42, Section 1.4, Table 1.4-2, dated July 1998.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the NOx and CO emission limits.

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

NOx	Methods 1 through 4 and 7E
CO	Methods 1 through 4 and 10

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P030 - No. 2 natural gas fired tunnel furnace

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P031 - Push-pull continuous pickle line (push-pull pickle stations, PPL uncoiler, PPL recoiler) with wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.033 pound per hour and 0.14 ton per year. There shall be no visible particulate emissions from the baghouse stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 thru 20 and OAC rules 3745-31-21 thru 27.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from the baghouse exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the baghouse exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
40 CFR Part 63, Subpart CCC [40 CFR 63.1158(a)(1)]	No exhaust gases from the scrubber stack shall contain HCl in a concentration in excess of 6 parts per million by volume (ppmv); or HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for PM and PM_{10}. It has been determined that the use of a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of a baghouse constitutes LAER for this emissions unit.

II. Operational Restrictions

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160).

2. The scrubber makeup water flow rate and recirculation water flow rate shall be continuously maintained at a value greater than or equal to the values established during the initial performance test which demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160, 63.1162 and 63.1165).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

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

   a. the identification of each excursion of the scrubber makeup water and recirculation water flow rates required in 40 CFR 63.1162(a)(2); and

   b. the identification of each malfunction of the control or process equipment required in 40 CFR 63.1165(a)(1) and (a)(2) and the information required in 40 CFR 63.1165(a)(3), (a)(4), (a)(5) and (b)(2)(iii).

   The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in 40 CFR 63.1160(b)(2)(i).

2. All deviation reports shall include the following information in addition to the information required in section A.IV.1:

   a. the date and time of the excursion/malfunction;

   b. the description of the excursion/malfuction;

   c. the cause of the malfunction/excursion;

   d. the length of time that the malfunction occurred;

   e. the immediate corrective actions taken;

   f. the date and time that the corrective actions were implemented;

   g. the description of the corrective actions taken; and

   h. the name of the individual responsible for implementing corrective actions.

All malfunctions shall be reported in accordance with OAC rule 3745-15-06 and Part I of this permit. All other deviations shall be reported semiannually in accordance with 40 CFR Part 63, Subpart CCC.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1164).

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:

a. Emission Limitation:

No exhaust gases from the scrubber stack shall contain HCl in a concentration in excess of 6 parts per million by volume (ppmv);

or

HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

Applicable Compliance Method:

Performance tests shall be conducted to measure the HCl mass emission rates at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR Part 63.1161.

b. Emission Limitation:

HCl emissions shall not exceed 0.033 pound per hour and 0.14 ton per year.

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be demonstrated based upon the results of the emission testing specified in 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. **Emission Limitation**:

PM and PM_{10} emissions from baghouse exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see 40 CFR 63.1161).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

There shall be no visible particulate emissions from the baghouse stack serving this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

2. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1161 and 63.1163).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P031 - Push-pull continuous pickle line (push-pull pickle stations, PPL uncoiler, PPL recoiler) with wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P032 - Pickle Galvanizing Line (PGL) No. 1 (including a scale breaker, continuous pickler, cold rollers, cleaner, galvanizing tank, and natural gas fired annealing furnace) with two wet scrubbers and baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric Acid (HCl) emissions shall not exceed 0.033 pound per hour and 0.14 ton per year. There shall be no visible particulate emissions from the baghouse stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and 40 CFR Part 63, Subpart CCC.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 thru 20 and OAC rules 3745-31-21 thru 27.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from the baghouse 16 exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. Emissions from the annealing furnace exhaust shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.45 pound per hour and 1.97 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Carbon monoxide (CO) emissions shall not exceed 5.04 pounds per hour and 22.08 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.33 pound per hour and 1.45 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the baghouse 16 exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
40 CFR Part 63, Subpart CCC [40 CFR 63.1158(a)(1)]	No exhaust gases from the scrubber stack(s) shall contain hydrochloric acid (HCl) in a concentration in excess of 6 parts per million by volume (ppmv); or HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, a baghouse and acceptance of a NOx emission limitation (AP42 emission factor) of 50 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

II. Operational Restrictions

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160 and 63.1164).

2. The scrubber makeup water flow rate and recirculation water flow rate shall be continuously maintained at a value greater than or equal to the values established during the initial performance test which demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160, 63.1162 and 63.1165).

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

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

a. the identification of each excursion of the scrubber makeup water and recirculation water flow rates required in 40 CFR 63,1162(a)(2); and

b. the identification of each malfunction of the control or process equipment required in 40 CFR 63.1165(a)(1) and (a)(2) and the information required in 40 CFR 63.1165(a)(3), (a)(4), (a)(5) and (b)(1)(iii).

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in 40 CFR 63.1160(b)(2)(i).

2. All deviation reports shall include the following information in addition to the information required in section A.IV.1:

   a. the date and time of the excursion/malfunction;

   b. the description of the excursion/malfuction;

   c. the cause of the malfunction/excursion;

   d. the length of time that the malfunction occurred;

   e. the immediate corrective actions taken;

   f. the date and time that the corrective actions were implemented;

   g. the description of the corrective actions taken; and

   h. the name of the individual responsible for implementing corrective actions.

   All malfunctions shall be reported in accordance with OAC rule 3745-15-06 and Part I of this permit. All other deviations shall be reported semiannually in accordance with 40 CFR Part 63, Subpart CCC.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

      No exhaust gases from the scrubber stack(s) shall contain hydrochloric acid (HCl) in a concentration in excess of 6 parts per million by volume (ppmv);

      or

      HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

Applicable Compliance Method:

Performance tests shall be conducted to measure the HCl mass emission rates at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR Part 63.1161.

b. Emission Limitation:

HCl emissions shall not exceed 0.033 pound per hour and 0.14 ton per year.

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be demonstrated based upon the results of the emission testing specified in 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

PM and PM10 emissions from the annealing furnace exhaust shall not exceed 0.45 pound per hour and 1.97 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions from the annealing furnace exhaust shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA

reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 5.04 pounds per hour and 22.08 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.33 pound per hour and 1.45 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 16 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see 40 CFR 63.1161).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

There shall be no visible particulate emissions from the baghouse stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

2. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1161 and 63.1163).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P032 - Pickle Galvanizing Line (PGL) No. 1 (including a scale breaker, continuous pickler, cold rollers, cleaner, galvanizing tank, and natural gas fired annealing furnace) with two wet scrubbers and baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P033 - Pickle Galvanizing Line (PGL) No. 2 (including a scale breaker, continuous pickler, cold rollers, cleaner, galvanizing tank, and natural gas fired annealing furnace) with two wet scrubbers and baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric Acid (HCl) emissions shall not exceed 0.033 pound per hour and 0.14 ton per year. There shall be no visible particulate emissions from the baghouse stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and 40 CFR Part 63, Subpart CCC.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 thru 20 and OAC rules 3745-31-21 thru 27.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from the baghouse 16 exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. Emissions from the annealing furnace exhaust shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.45 pound per hour and 1.97 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Carbon monoxide (CO) emissions shall not exceed 5.04 pounds per hour and 22.08 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.33 pound per hour and 1.45 tons per year as a rolling, 12-month summation. See section A.I.2.a below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the baghouse 16 exhaust shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
40 CFR Part 63, Subpart CCC [40 CFR 63.1158(a)(1)]	No exhaust gases from the scrubber stack(s) shall contain hydrochloric acid (HCl) in a concentration in excess of 6 parts per million by volume (ppmv); or HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, a baghouse and acceptance of a NOx emission limitation (AP42 emission factor) of 50 lbs of NOx / mmcf constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel and a baghouse constitutes LAER for this emissions unit.

II. Operational Restrictions

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160 and 63.1164)

2. The scrubber makeup water flow rate and recirculation water flow rate shall be continuously maintained at a value greater than or equal to the values established during the initial performance test which demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160, 63.1162 and 63.1165)

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

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

a. the identification of each excursion of the scrubber makeup water and recirculation water flow rates required in 40 CFR 63.1162(a)(2); and

b. the identification of each malfunction of the control or process equipment required in 40 CFR 63.1165(a)(1) and (a)(2) and the information required in 40 CFR 63.1165(a)(3), (a)(4), (a)(5) and (b)(1)(iii).

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in 40 CFR 63.1160(b)(2)(i).

2. All deviation reports shall include the following information in addition to the information required in section A.IV.1:

   a. the date and time of the excursion/malfunction;

   b. the description of the excursion/malfuction;

   c. the cause of the malfunction/excursion;

   d. the length of time that the malfunction occurred;

   e. the immediate corrective actions taken;

   f. the date and time that the corrective actions were implemented;

   g. the description of the corrective actions taken; and

   h. the name of the individual responsible for implementing corrective actions.

   All malfunctions shall be reported in accordance with OAC rule 3745-15-06 and Part I of this permit. All other deviations shall be reported semiannually in accordance with 40 CFR Part 63, Subpart CCC.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

      No exhaust gases from the scrubber stack(s) shall contain hydrochloric acid (HCl) in a concentration in excess of 6 parts per million by volume (ppmv);

      or

      HCl shall not be emitted at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

Applicable Compliance Method:

Performance tests shall be conducted to measure the HCl mass emission rates at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR Part 63.1161.

b. Emission Limitation:

HCl emissions shall not exceed 0.033 pound per hour and 0.14 ton per year.

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be demonstrated based upon the results of the emission testing specified in 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

PM and PM10 emissions from the annealing furnace exhaust shall not exceed 0.45 pound per hour and 1.97 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions from the annealing furnace exhaust shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 5.04 pounds per hour and 22.08 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.33 pound per hour and 1.45 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.060 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 16 shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.99 pound per hour and 4.34 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A see 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

h. Emission Limitation:

There shall be no visible particulate emissions from the baghouse stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

2. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1161 and 63.1163).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P033 - Pickle Galvanizing Line (PGL) No. 2 (including a scale breaker, continuous pickler, cold rollers, cleaner, galvanizing tank, and natural gas fired annealing furnace) with two wet scrubbers and baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P035 - Acid regeneration plant No. 1 (preconcentrator, reactor, diffusor, venturi, absorber, natural gas burners) with two stage wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrogen chloride (HCl) emissions shall not exceed 1.10 pounds per hour and 4.82 tons per year. There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and 40 CFR Part 63, Subpart CCC.
OAC rules 3745-31-10 thru 20	Emissions from the scrubber exhaust shall not exceed the following: Particulate matter (PM) emissions shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 2.32 pounds per hour and 10.16 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 3.89 pounds per hour and 17.04 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.25 pound per hour and 1.10 tons per year as a rolling, 12-month summation. See section A.I.2.a below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
40 CFR Part 63, Subpart CCC **[40 CFR 63.1158(b)]**	No exhaust gases from the scrubber stack shall contain hydrochloric acid (HCl) in a concentration in excess of 12 parts per million by volume (ppmv); and No exhaust gases from the scrubber stack shall contain Cl_2 in a concentration in excess of 6 parts per million by volume (ppmv).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit.

II. Operational Restrictions

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1159, 63.1160 and 63.1164).

2. The scrubber makeup water flow rate and recirculation water flow rate shall be continuously maintained at a value greater than or equal to the values established during the initial performance test which demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160, 63.1162 and 63.1165).

IV. Reporting Requirements

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

a. the identification of each excursion of the scrubber makeup water and recirculation water flow rates required in 40 CFR 63.1162(a)(2); and

b. the identification of each malfunction of the control or process equipment required in 40 CFR 63.1165(a)(1) and (a)(2) and the information required in 40 CFR 63.1165(a)(3), (a)(4), (a)(5) and (b)(1)(iii).

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in 40 CFR 63.1160(b)(2)(i).

2. All deviation reports shall include the following information in addition to the information required in section A.IV.1:

a. the date and time of the excursion/malfunction;

b. the description of the excursion/malfuction;

c. the cause of the malfunction/excursion;

d. the length of time that the malfunction occurred;

e. the immediate corrective actions taken;

f. the date and time that the corrective actions were implemented;

g. the description of the corrective actions taken; and

h. the name of the individual responsible for implementing corrective actions.

All malfunctions shall be reported in accordance with OAC rule 3745-15-06 and Part I of this permit. All other deviations shall be reported semiannually in accordance with 40 CFR Part 63, Subpart CCC.

3. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1164).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

b. Emission Limitation:

HCl emissions shall not exceed 1.10 pounds per hour and 4.82 tons per year.

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be based upon the results of the emission testing specified in 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

PM and PM10 emissions from the scrubber exhaust shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions from the scrubber exhaust shall not exceed 2.32 pounds per hour and 10.16 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA

reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

CO emissions from the scrubber exhaust shall not exceed 3.89 pounds per hour and 17.04 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

VOC emissions from the scrubber exhaust shall not exceed 0.25 pound per hour and 1.10 tons per year as a rolling, 12-month summation.
Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

No exhaust gases from the scrubber stack shall contain HCl in a concentration in excess of 12 ppm;

and

No exhaust gases from the scrubber stack shall contain Cl_2 in a concentration in excess of 6 ppm;

Applicable Compliance Method:

Performance tests shall be conducted to measure the HCl mass emission rates at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161.

2. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1161 and 63.1163).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P035 - Acid regeneration plant No. 1 (preconcentrator, reactor, diffusor, venturi, absorber, natural gas burners) with two stage wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P036 - Acid regeneration plant No. 2 (preconcentrator, reactor, diffusor, venturi absorber, natural gas burners) with two stage wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrogen chloride (HCl) emissions shall not exceed 1.10 pounds per hour and 4.82 tons per year. There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20), OAC rules 3745-31-(21) thru (27) and 40 CFR Part 63, Subpart CCC.
OAC rules 3745-31-10 thru 20	Emissions from the scrubber exhaust shall not exceed the following: Particulate matter (PM) emissions shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 2.32 pounds per hour and 10.16 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 3.89 pounds per hour and 17.04 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.25 pound per hour and 1.10 tons per year as a rolling, 12-month summation. See section A.I.2.a below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
40 CFR Part 63, Subpart CCC [40 CFR 63.1158(b)]	No exhaust gases from the scrubber stack shall contain hydrochloric acid (HCl) in a concentration in excess of 12 parts per million by volume (ppmv); and No exhaust gases from the scrubber stack shall contain Cl_2 in a concentration in excess of 6 parts per million by volume (ppmv).

2. Additional Terms and Conditions

2.a The permittee is required to perform a Best Available Control Technology (BACT) review for NOx, CO, SO_2, PM_{10}, and VOC. It has been determined that the use of natural gas as fuel, low-NOx burners, and acceptance of a NOx emission limitation of 50 lbs of NOx / mmcf (AP42 emission factor) constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.b The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of natural gas as fuel constitutes LAER for this emissions unit.

II. Operational Restrictions

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1159, 63.1160 and 63.1164).

2. The scrubber makeup water flow rate and recirculation water flow rate shall be continuously maintained at a value greater than or equal to the values established during the initial performance test which demonstrated compliance.

III. Monitoring and/or Record Keeping Requirements

1. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1160, 63.1162 and 63.1165).

IV. Reporting Requirements

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

a. the identification of each excursion of the scrubber makeup water and recirculation water flow rates required in 40 CFR 63.1162(a)(2); and

b. the identification of each malfunction of the control or process equipment required in 40 CFR 63.1165(a)(1) and (a)(2) and the information required in 40 CFR 63.1165(a)(3), (a)(4), (a)(5) and (b)(1)(iii).

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in 40 CFR 63.1160(b)(2)(i).

2. All deviation reports shall include the following information in addition to the information required in section A.IV.1:

a. the date and time of the excursion/malfunction;

b. the description of the excursion/malfuction;

c. the cause of the malfunction/excursion;

d. the length of time that the malfunction occurred;

e. the immediate corrective actions taken;

f. the date and time that the corrective actions were implemented;

g. the description of the corrective actions taken; and

h. the name of the individual responsible for implementing corrective actions.

All malfunctions shall be reported in accordance with OAC rule 3745-15-06 and Part I of this permit. All other deviations shall be reported semiannually in accordance with 40 CFR Part 63, Subpart CCC.

3. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1164).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

b. Emission Limitation:

HCl emissions shall not exceed 1.10 pounds per hour and 4.82 tons per year.

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be based upon the results of the emission testing specified in 40 CFR 63.1161.

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

PM and PM10 emissions from the scrubber exhaust shall not exceed 2.62 pounds per hour and 11.48 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

NOx emissions from the scrubber exhaust shall not exceed 2.32 pounds per hour and 10.16 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 50 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

CO emissions from the scrubber exhaust shall not exceed 3.89 pounds per hour and 17.04 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

VOC emissions from the scrubber exhaust shall not exceed 0.25 pound per hour and 1.10 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.046 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

No exhaust gases from the scrubber stack shall contain HCl in a concentration in excess of 12 ppm;

and

No exhaust gases from the scrubber stack shall contain Cl_2 in a concentration in excess of 6 ppm;

Applicable Compliance Method:

Performance tests shall be conducted to measure the HCl mass emission rates at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161.

2. See 40 CFR Part 63, Subpart CCC (40 CFR 63.1161 and 63.1163).

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P036 - Acid regeneration plant No. 2 (preconcentrator, reactor, diffusor, venturi absorber, natural gas burners) with two stage wet scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P037 - Laminar cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.24 pound per hour and 1.05 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) shall not exceed 0.24 pound per hour and 1.05 ton per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM and PM10 emissions shall not exceed 0.24 pound per hour and 1.05 ton per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P037 - Laminar cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P038 - Caster indirect cooling water (ICW) cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.52 pound per hour and 2.28 tons per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM_{10}) shall not exceed 0.52 pound per hour and 2.28 tons per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM/PM10 emissions shall not exceed 0.52 pound per hour and 2.28 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P038 - Caster indirect cooling water (ICW) cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P039 - Caster direct cooling water (DCW) cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.59 pound per hour and 2.58 tons per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) shall not exceed 0.59 pound per hour and 2.58 tons per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM/PM10 emissions shall not exceed 0.59 pound per hour and 2.58 tons per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P039 - Caster direct cooling water (DCW) cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P040 - Pickle line cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the stack serving this emissions unit. The requirements of this rule also include compliance with the requirements and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.15 pound per hour and 0.66 ton per year as a rolling, 12-month summation.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM_{10}) shall not exceed 0.15 pound per hour and 0.66 ton per year as a rolling, 12-month summation.
OAC rule 3745-17-07(A)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a Per the requirements of OAC rules 3745-31-15 and 3745-31-21, the permittee is required to perform a Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) review for PM10/PM2.5, respectively. The implementation of high efficiency drift eliminators (0.0005% drift) and operation and maintenance of a Total Dissolved Solids (TDS) limitation of no greater than 3000 parts per million (ppm) constitutes BACT / LAER for this emissions unit.

II. Operational Restrictions

1. The permittee shall not exceed an average TDS content of 3,000 parts per million (ppm) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall sample the cooling tower water weekly to adequately demonstrate compliance with the average concentration of TDS limitation. Each weekly TDS sample shall be analyzed in accordance with the procedures specified in 40 CFR Part 136, Table 1B, Method 2540C. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

2. The permittee shall continuously monitor the flow rate across the cooling tower and determine the weekly average flow rate.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Portsmouth Local Air Agency that identify all periods of time during which the concentration of TDS of the cooling water did not comply with the TDS requirements specified above. These reports shall be submitted in accordance with the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the stack serving this emissions unit.

      Applicable Compliance Method:

      Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

   b. Emission Limitation:

      PM and PM10 emissions shall not exceed 0.15 pound per hour and 0.66 ton per year as a rolling, 12-month summation.

      Applicable Compliance Method:

      Compliance with the hourly emission limitation shall be determined based on the following calculation:

E_{hourly} = (weekly average flow rate, in gal/min) x (0.0005%/100) x (weekly average total dissolved solids content, in ppm x 60 min/hr) / 1,000,000

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P040 - Pickle line cooling tower with drift eliminators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P901 - Scrap barge unloading to truck and Coal and Iron Ore barge unloading controlled by baghouses 1A and 1B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-10 thru 20	Particulate matter (PM) emissions from baghouse 1A and 1B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM emissions shall not exceed 6.15 tons per year as a rolling, 12-month summation. See sections A.I.2.b and A.II.1 below.
OAC rules 3745-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from baghouse 1A and 1B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM_{10} shall not exceed 2.84 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See sections A.I.2.c and A.II.1 below.

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Barge to crane
Bucket crane unloading of coal and iron ore to hopper
Hopper to conveyor
Crane Unloading scrap to truck

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10} . It has been determined that the use of enclosures, minimizing drop height, and transfer points vented to baghouse constitutes BACT for this emissions unit. The emission limitation based on the BACT requirements is listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitation based on the LAER requirements is listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, minimizing drop height, and transfer points vented to baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

1. The maximum throughput for this emissions unit shall not exceed 2,536,262 tons of coal and 5,714,385 tons of iron ore, based upon a rolling, 12-month summation of the throughput rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal and iron ore throughputs specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons	Maximum Allowable Iron Ore Throughput, Tons
1	250,000	500,000
1-2	500,000	1,000,000
1-3	750,000	1,500,000
1-4	1,000,000	2,000,000
1-5	1,250,000	2,500,000
1-6	1,500,000	3,000,000
1-7	1,750,000	3,500,000
1-8	2,000,000	4,000,000
1-9	2,536,262	5,714,385
1-10	2,536,262	5,714,385
1-11	2,536,262	5,714,385
1-12	2,536,262	5,714,385

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

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)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:

   a. the material throughput for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.

IV. Reporting Requirements

1. The permittee shall submit semiannual 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 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 any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

   a. an identification of all exceedances of the rolling, 12-month material throughput restrictions, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and

   b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the Part I - General Terms and Conditions of this permit under section (A)(1).

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:

   a. **Emission Limitation**:

      Fugitive PM emissions shall not exceed 6.15 tons per year as a rolling, 12-month summation.

Fugitive PM_{10} emissions shall not exceed 2.84 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with fugitive PM and PM10 emission limitations shall be determined by using the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 04, 2007. These emission limits were based on a maximum through-put of 2,536,262 tons of coal and 5,714,385 tons of iron ore, per year, respectively, an average moisture content of 4.8% for coal and 5.4% for iron ore, an average wind speed of 8.7 miles per hour and n overall 94% control efficiency (three sided enclosure of crane to hopper vented to baghouse) for PM and PM10 emissions.

b. Emission Limitation:

PM emissions from baghouse 1A and 1B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation.

PM10 from baghouse 1A and 1B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and Method 202 of 40 CFR Part 51, Appendix M (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.93 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation for the scrap, coal and iron ore barge unloading process 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”).

2. The permittee shall conduct, or have conducted, emission testing for baghouses 1A and 1B in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency’s refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P901 - Scrap barge unloading to truck and Coal and Iron Ore barge unloading controlled by baghouses 1A and 1B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P902 - Coal and iron ore railcar unloading with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d.) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Particulate matter (PM) emissions from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM emissions shall not exceed 0.26 ton per year as a rolling, 12-month summation. See sections A.I.2.b and A.II.1 below.
OAC rules 3745-31-(21) thru (27)	Particulate matter emissions of less than 10 microns (PM10) from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions shall not exceed 0.12 ton per year as a rolling, 12-month summation. See sections A.I.2.c and A.II.1 below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Railcar bottom dump to Grizzley Feeder 1

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

1. The maximum throughput for this emissions unit shall not exceed 2,536,262 tons of coal and 5,714,385 tons of iron ore, based upon a rolling, 12-month summation of the throughput rates.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the coal and iron ore throughputs specified in the following table:

Month(s)	Maximum Allowable Coal Throughput, Tons	Maximum Allowable Iron Ore Throughput, Tons
1	250,000	500,000
1-2	500,000	1,000,000
1-3	750,000	1,500,000
1-4	1,000,000	2,000,000
1-5	1,250,000	2,500,000
1-6	1,500,000	3,000,000
1-7	1,750,000	3,500,000
1-8	2,000,000	4,000,000
1-9	2,536,262	5,714,385
1-10	2,536,262	5,714,385
1-11	2,536,262	5,714,385
1-12	2,536,262	5,714,385

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

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)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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;

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

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

   a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and

   b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.

5. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

6. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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:

   a. Emission Limitation:

      There shall be no visible particulate emissions from the baghouse exhaust stack.

      There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

      Applicable Compliance Method:

      If required, compliance with the visible particulate emission limitations for the coal and iron ore railcar unloading process 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”).

b. Emission Limitation:

PM and PM_{10} emissions from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.93 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Fugitive PM emissions shall not exceed 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions shall not exceed 0.12 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average

coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 1B in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P902 - Coal and iron ore railcar unloading with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P903 - Coal conveying and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM emissions shall not exceed 0.75 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions shall not exceed 0.29 ton per year as a rolling, 12-month summation. See section A.I.2.c below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Truck to Grizzley Feeder 1
Grizzley Feeder 1 to Conveyor 1
Conveyor 1 to Conveyor 2
Conveyor 2 to Storage Piles (Building #2)
Storage Piles (Building #2) to Front end Loader

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rule 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records

required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth local air agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the Part I - General Terms and Conditions of this permit under section (A)(1).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal handling, conveying and crushing process 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”).

b. Emission Limitation:

PM and PM_{10} emissions from baghouse 1B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.93 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Fugitive PM emissions shall not exceed 0.75 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions shall not exceed 0.29 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 1B in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P903 - Coal conveying and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P904 - Iron ore conveying and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-21 thru 27.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from baghouse 1A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM emissions shall not exceed 1.39 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from baghouse 1A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions shall not exceed 0.58 ton per year as a rolling, 12-month summation. See section A.I.2.c below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Truck to Grizzley Feeder 1
Grizzley Feeder 1 to Conveyor 1
Conveyor 1 to Conveyor 2
Conveyor 2 to Storage Piles (Building #1)
Storage Piles (Building #1) to Frontend Loader
Truck to Mill Scale Storage Pile
Mill Scale Storage Pile to Frontend Loader

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records

required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. The permittee shall submit semiannual 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 permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the iron ore conveying and storage process 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”).

b. Emission Limitation:

PM and PM_{10} emissions from baghouse 1A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 0.93 pound per hour and 4.07 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.93 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Fugitive PM emissions shall not exceed 1.39 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions shall not exceed 0.58 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 1A in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P904 - Iron ore conveying and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P905 - Coal grinding and handling line 2A (conveyor 3A, hopper 1A, natural gas fired hot gas generator, grinder 1A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
Front end loader to grizzly feeder 2A
Grizzly feeder 2A to conveyor 3A
Conveyor 3A to hopper 1A
Hopper 1A to grinder 1A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse

constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

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

   a. each day during which an inspection was not performed by the required frequency; and

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

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P905 - Coal grinding and handling line 2A (conveyor 3A, hopper 1A, natural gas fired hot gas generator, grinder 1A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P906 - Coal grinding and handling line 3A (conveyor 4A, hopper 2A, natural gas fired hot gas generator, grinder 2A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
Front end loader to grizzly feeder 3A
Grizzly feeder 3A to conveyor 4A
Conveyor 4A to hopper 2A
Hopper 2A to grinder 2A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse

constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

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

   a. each day during which an inspection was not performed by the required frequency; and

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

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P906 - Coal grinding and handling line 3A (conveyor 4A, hopper 2A, natural gas fired hot gas generator, grinder 2A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P907 - Coal grinding and handling line 4A (conveyor 5A, hopper 3A, natural gas fired hot gas generator, grinder 3A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 4A
Grizzly feeder 4A to conveyor 5A
Conveyor 5A to hopper 3A
Hopper 3A to grinder 3A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

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

   a. each day during which an inspection was not performed by the required frequency; and

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

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P907 - Coal grinding and handling line 4A (conveyor 5A, hopper 3A, natural gas fired hot gas generator, grinder 3A) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P908 - Coal grinding and handling line 2B (conveyor 3B, hopper 1B, natural gas fired hot gas generator, grinder 1B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 2B
Grizzly feeder 2B to conveyor 3B
Conveyor 3B to hopper 1B
Hopper 1B to grinder 1B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

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

   a. each day during which an inspection was not performed by the required frequency; and

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

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

   a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. Emission Limitation:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P908 - Coal grinding and handling line 2B (conveyor 3B, hopper 1B, natural gas fired hot gas generator, grinder 1B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P909 - Coal grinding and handling line 3B (conveyors 4B, hopper 2B, natural gas fired hot gas generator, grinder 2B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 3B
Grizzly feeder 3B to conveyor 4B
Conveyor 4B to hopper 2B
Hopper 2B to grinder 2B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

2. 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.

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P909 - Coal grinding and handling line 3B (conveyors 4B, hopper 2B, natural gas fired hot gas generator, grinder 2B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P910 - Coal grinding and handling line 4B (conveyor 5B, hoppers 3B, natural gas fired hot gas generator, grinder 3B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with 40 CFR Part 60, Subpart Y and OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NO_x) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	PM emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than 10 microns (PM10) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. PM10 emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation. See section A.I.2.c below.
40 CFR Part 60, Subpart Y	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 4B
Grizzly feeder 4B to conveyor 5B
Conveyor 5B to hopper 3B
Hopper 3B to grinder 3B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limits based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

1. Pursuant to the NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. Construction date (no later than 30 days after such date);

   b. Anticipated start up date (not more than 60 days or less than 30 days prior to such date);

   c. Actual start-up date (within 15 days of such date); and

   d. Date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P. O. Box 1049
   Columbus, Ohio 43216-1049

and

Portsmouth Local Air Agency
605 Washington Street, Third Floor
Portsmouth, Ohio 45662

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

   a. each day during which an inspection was not performed by the required frequency; and

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

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The deviation reports shall be submitted in accordance with the reporting requirements of Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generator shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generator shall not exceed 0.85 pounds per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generator shall not exceed 0.06 pound per hour and 0.24 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A , Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emission units P905 thru P910, combined, shall not exceed 0.47 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P905 thru P910, combined, shall not exceed 0.18 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

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

60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P910 - Coal grinding and handling line 4B (conveyor 5B, hoppers 3B, natural gas fired hot gas generator, grinder 3B) with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P911 - Iron Ore Grinding and Handling line 5A including grizzly feeder 5A, conveyor 6A, hopper 4A, natural gas fired hot gas generator, and grinder 4A controlled by cyclones 1A and 2A and baghouse 5A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 5A
Grizzly feeder 5A to conveyor 6A
Conveyor 6A to hopper 4A
Hopper 4A to grinder 4A
Grinder 4A to cyclone 1A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a

baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P911 - Iron Ore Grinding and Handling line 5A including grizzly feeder 5A, conveyor 6A, hopper 4A, natural gas fired hot gas generator, and grinder 4A controlled by cyclones 1A and 2A and baghouse 5A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P912 - Iron Ore Grinding and Handling line 6A including conveyor 7A, hopper 5A, natural gas fired dryers, and grinder 5A, controlled by cyclones 3A and 4A and baghouse 6A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 6A
Grizzly feeder 6A to conveyor 7A
Conveyor 7A to hopper 5A
Hopper 5A to grinder 5A
Grinder 5A to cyclone 3A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a baghouse constitutes BACT for this emissions unit. The emission limitations based

on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing

by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference

document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A , Appendix M (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P912 - Iron Ore Grinding and Handling line 6A including conveyor 7A, hopper 5A, natural gas fired dryers, and grinder 5A, controlled by cyclones 3A and 4A and baghouse 6A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P913 - Iron Ore Grinding and Handling line 7A including conveyors 8A, hopper 6A, natural gas fired dryer, and grinder 6A, controlled by cyclones 5A and 6A and baghouse 7A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 7A
Grizzly feeder 7A to conveyor 8A
Conveyor 8A to hopper 6A
Hopper 6A to grinder 6A
Grinder 6A to cyclone 5A

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a baghouse constitutes BACT for this emissions unit. The emission limitations based

on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing

by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference

document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P913 - Iron Ore Grinding and Handling line 7A including conveyors 8A, hopper 6A, natural gas fired dryer, and grinder 6A, controlled by cyclones 5A and 6A and baghouse 7A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P914 - Iron Ore Grinding and Handling line 5B including conveyor 6B, hopper 4B, natural gas fired dryer, and grinder 4B, controlled by cyclones 1B and 2B and baghouse 5B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 5B
Grizzly feeder 5B to conveyor 6B
Conveyor 6B to hopper 4B
Hopper 4B to grinder 4B
Grinder 4B to cyclone 1B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a baghouse constitutes BACT for this emissions unit. The emission limitations based

on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing

by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference

document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P914 - Iron Ore Grinding and Handling line 5B including conveyor 6B, hopper 4B, natural gas fired dryer, and grinder 4B, controlled by cyclones 1B and 2B and baghouse 5B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P915 - Iron Ore Grinding and Handling line 6B including conveyor 7B, hopper 5B, natural gas fired dryer, and grinder 5B, controlled by cyclones 3B and 4B and baghouse 6B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stacks. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 6B
Grizzly feeder 6B to conveyor 7B
Conveyor 7B to hopper 5B
Hopper 5B to grinder 5B
Grinder 5B to cyclone 3B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a baghouse constitutes BACT for this emissions unit. The emission limitations based

on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing

by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference

document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P915 - Iron Ore Grinding and Handling line 6B including conveyor 7B, hopper 5B, natural gas fired dryer, and grinder 5B, controlled by cyclones 3B and 4B and baghouse 6B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P916 - Iron Ore Grinding and Handling line 7B including conveyor 8B, hopper 6B, natural gas fired dryer, and grinder 6B, controlled by cyclones 5B and 6B and baghouse 7B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stacks. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See sections A.I.2.a through A.I.2.d below. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-10 thru 20	Emissions from the hot gas generator shall not exceed the following: Particulate matter (PM) emissions shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation. Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Particulate matter (PM) emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P911 through P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per rolling, 12-month period. PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation. Fugitive PM_{10} from emissions units P911 through P916, combined, shall not exceed 0.40 ton per year, as a rolling 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Front end loader to grizzly feeder 7B
Grizzly feeder 7B to conveyor 8B
Conveyor 8B to hopper 6B
Hopper 6B to grinder 6B
Grinder 6B to cyclone 5B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures, cyclones and a baghouse constitutes BACT for this emissions unit. The emission limitations based

on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures, cyclones and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

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

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

   e. the time of day of each inspection.

   The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

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

   a. each day during which an inspection was not performed by the required frequency; and

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

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit under section (A)(1).

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:

a. **Emission Limitation**:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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”).

b. Emission Limitation:

PM and PM10 emissions from the hot gas generator shall not exceed 0.08 pound per hour and 0.35 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 7.6 lbs of particulates/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

c. Emission Limitation:

NOx emissions from the hot gas generators shall not exceed 1.01 pounds per hour and 4.42 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

d. Emission Limitation:

CO emissions from the hot gas generators shall not exceed 0.85 pound per hour and 3.72 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

e. Emission Limitation:

VOC emissions from the hot gas generators shall not exceed 0.06 pound per hour and 0.26 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate of 0.010 mmcf/hr. The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

The ton per year limitation was developed by multiplying the hourly particulate emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

f. **Emission Limitation**:

PM and PM_{10} emissions from baghouse 5A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.56 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

g. Emission Limitation:

Fugitive PM emissions from emissions units P911 thru P916, combined, shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

h. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P911 thru P916 combined shall not exceed 0.40 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emissions limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006)., emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average iron ore moisture content of 5.4%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 5A in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - P916 - Iron Ore Grinding and Handling line 7B including conveyor 8B, hopper 6B, natural gas fired dryer, and grinder 6B, controlled by cyclones 5B and 6B and baghouse 7B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P917 - Rotary Hearth Furnace (RHF) Charge Mixers including storage hoppers (22), conveyors (25), mixers (2) and haul trucks controlled by Grinder baghouses 2A, 3A, 4A, 5A, 6A, 7A, 2B, 3B, 4B, 5B, 6B, and 7B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stacks. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d.) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	PM emissions from each coal grinder baghouse (2A, 3A, 4A, 2B, 3B, 4B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.14 tons per year as a rolling, 12-month summation. PM emissions from each iron ore grinder baghouse (5A, 6A, 7A, 5B, 6B, 7B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.58 tons per year as a rolling, 12-month summation. Fugitive particulate emissions shall not exceed 2.83 tons per year as a rolling, 12-month summation. See section A.I.2.b below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-(21) thru (27)	**PM10 emissions from each coal grinder baghouse (2A, 3A, 4A, 2B, 3B, 4B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.14 tons per year as a rolling, 12-month summation.** **PM_{10} emissions from each iron ore grinder baghouse (5A, 6A, 7A, 5B, 6B, 7B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.58 tons per year as a rolling, 12-month summation.** Fugitive PM_{10} emissions shall not exceed 1.03 tons per year as a rolling, 12-month summation. See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Coal and iron ore grinders to conveyors
Conveyor to hopper
Pneumatic truck to hopper
Frontend loader to hopper
Hopper to conveyor
Conveyor to conveyor
Conveyor to mixer
Mixer to conveyor

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of wet suppression, enclosures, and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limits based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been

determined that the use of wet suppression, enclosures, and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as result of an inspection, was no implemented.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for particulate emissions.

4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

5. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, cCompliance with the visible particulate emission limitations for the coal conveying and storage process 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”).

b. Emission Limitation:

PM emissions from each coal grinder baghouse (2A, 3A, 4A, 2B, 3B, 4B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.14 tons per year as a rolling, 12-month summation.

PM_{10} emissions from each coal grinder baghouse (2A, 3A, 4A, 2B, 3B, 4B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.14 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (1.40 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. **Emission Limitation**:

PM emissions from each iron ore grinder baghouse (5A, 6A, 7A, 5B, 6B, 7B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.58 tons per year as a rolling, 12-month summation.

PM_{10} emissions from each iron ore grinder baghouse (5A, 6A, 7A, 5B, 6B, 7B) shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.04 pounds per hour and 4.58 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (1.04 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Fugitive PM emissions shall not exceed 2.83 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles,

dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/20/04) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on a 94% overall control efficiency for PM.

e. Emission Limitation:

Fugitive PM_{10} emissions shall not exceed 1.03 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/20/04) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouses 2A, 3A, 4A, 2B, 3B, 4B, **5A, 6A, 7A, 5B, 6B, and 7B** in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P917 - Rotary Hearth Furnace (RHF) Charge Mixers including storage hoppers (22), conveyors (25), mixers (2) and haul trucks controlled by Grinder baghouses 2A, 3A, 4A, 5A, 6A, 7A, 2B, 3B, 4B, 5B, 6B, and 7B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P918 - RHF Lines A, B and C, including, conveyors(5), hoppers (9), screens (3), pelletizers (3), controlled by baghouse 8A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d) The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	PM emissions from baghouse 8A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-(21) thru (27)	PM10 emissions from baghouse 8A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Conveyor 21 to hoppers 20A, 20B and 20C
Hoppers 20A, 20B and 20C to conveyors 22A, 22B and 22C
Conveyors 22A, 23B and 23C to pelletizers 1A, 1B and 1C
Pelletizers 1A, 1B and 1C to conveyors 23A, 23B and 23C
Conveyors 23A, 23B and 23C to screens 1A, 1B and 1C
Screen 1A, 1B and 1C to conveyors 24A, 24B and 24C
Conveyor 24A, 24B and 24C to conveyors 27A, 27B and 27C
Conveyors 27A, 27B and 27C to conveyors 28A, 28B and 28C
Conveyors 28A, 28B and 28C to RHF 1, RHF 2 and RHF 3
Section A screens to conveyors 25 and 26
Conveyor 26 to storage pile
Storage pile to front end loader

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 measures were implemented;

d. on a calendar quarter basis, the total number of days the control measure(s) was/were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information

for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

1. The permittee shall submit semi-annual 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 result of an inspection, was not implemented.

2. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. 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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitations:

   There shall be no visible particulate emissions from the baghouse exhaust stack.

   There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

   Applicable Compliance Method:

   If required, compliance with the visible particulate emission limitations for the coal conveying and storage process 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”).

   b. Emission Limitations:

   PM and PM_{10} emissions from baghouse 8A shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

   The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

   c. Emission Limitation:

   Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to

Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.
Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 8A in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P918 - RHF Lines A, B and C, including, conveyors(5), hoppers (9), screens (3), pelletizers (3), controlled by baghouse 8A

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P919 - RHF Lines D, E and F, including, conveyors(6), hoppers (3), screens (3), pelletizers (3), RHF vessels, controlled by baghouse 8B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d) The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	PM emissions from baghouse 8B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-(21) thru (27)	PM10 emissions from baghouse 8B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Conveyor 21 to hoppers 20D, 20E and 20F
Hoppers 20D, 20E and 20F to conveyors 22D, 22E and 22F
Conveyors 22D, 22E and 22F to pelletizers 1D, 1E and 1F
Pelletizers 1D, 1E and 1F to conveyors 23D, 23E and 23F
Conveyors 23D, 23E and 23F to screens 1D, 1E and 1F
Screen 1D, 1E and 1F to conveyors 24D, 24E and 24F
Conveyor 24D, 24E and 24F to conveyors 27D, 27E and 27F
Conveyors 27D, 27E and 27F to conveyors 28D, 28E and 28F
Conveyors 28D, 28E and 28F to RHF 4, RHF 5 and RHF 6
Section A screens to conveyors 25 and 26
Conveyor 26 to storage pile
Storage pile to front end loader

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information

for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. The permittee shall submit semi-annual 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 permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. 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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitations:

   There shall be no visible particulate emissions from the baghouse exhaust stack.

   There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

   Applicable Compliance Method:

   If required, compliance with the visible particulate emission limitations for the coal conveying and storage process 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”).

   b. Emission Limitations:

   PM and PM_{10} emissions from baghouse 8B shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

   The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

   c. Emission Limitation:

   Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   Compliance with the fugitive PM emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to

Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitations shall be determined by the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. These emission limitations were based on an average coal moisture content of 4.8%, an average wind speed of 8.7 miles per hour and a 94% overall control efficiency for PM_{10}.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 8B in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P919 - RHF Lines D, E and F, including, conveyors(6), hoppers (3), screens (3), pelletizers (3), RHF vessels, controlled by baghouse 8B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P920 - Direct Reduced Iron (DRI) material handling and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.a through A.I.2.d.) The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).
OAC rules 3745-31-(10) thru (20)	Particulate matter (PM) emissions from the baghouse 10 stack shall not exceed 0.47 pound per hour and 2.06 tons per year as a rolling, 12-month summation. Fugitive particulate emissions shall not exceed 1.43 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-(21) thru (27)	**Particulate matter emissions of less than ten microns (PM_{10}) from the baghouse 10 stack shall not exceed 0.47 pound per hour and 2.05 tons per year as a rolling, 12-month summation.** **Fugitive PM_{10} emissions shall not exceed 0.56 ton per year as a rolling, 12-month summation.** See section A.I.2.c below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	**The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).**
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

DRI unloading from truck to DRI storage building
DRI loaded from storage piles to front end loader
Front end loader to traveling hopper 24
Traveling hopper 24 to conveyor 34
Conveyor 34 to conveyor 35

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of building enclosure, enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of building enclosures, enclosures and a baghouse constitutes LAER for this emissions unit:

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action and the names of the personnel who performed the work. Investigation and records

required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

4. 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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

There shall be no visible particulate emissions from the baghouse exhaust stack.

There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitations for the coal conveying and storage process 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").

b. Emission Limitation:

Fugitive particulate emissions shall not exceed 1.43 tons per year as a rolling, 12-month summation.

Fugitive PM_{10} emissions shall not exceed 0.56 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitations specified above shall be determined by the record keeping requirements specified in section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007.

c. Emission Limitation:

PM and **PM_{10}** emissions from baghouse 10 stack shall not exceed 0.47 pound per hour and 2.06 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.47 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 10 in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A . Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

   Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P920 - Direct Reduced Iron (DRI) material handling and storage with baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P921 - Alloy , Flux, and Carbon Railcar / Truck Unloading, Handling and Storage controlled by a baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. The requirements of this rule also include compliance with OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). See sections A.I.2.a through A.I.2.d below.
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions from baghouse 11 shall not exceed 1.40 pounds per hour, 0.0022 grain per dry standard foot of exhaust gases and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions shall not exceed 0.60 ton per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rules 3745-31-21 thru 27	Particulate matter emissions of less than ten microns (PM_{10}) from baghouse 11 shall not exceed 1.40 pounds per hour, 0.0022 grain per dry standard foot of exhaust gases and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions shall not exceed 0.22 ton per year as a rolling, 12-month summation. See section A.I.2.c below.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

alloy, flux, and carbon unloading via rail car bottom dumping
alloy, flux, and carbon unloading via truck dumping
alloy hopper to belt conveyor (5)
flux hopper to belt conveyor (10)
carbon hopper to belt conveyor (5)
alloy belt conveyor to belt conveyor (5)
flux belt conveyor to belt conveyor (5)
carbon belt conveyor to belt conveyor (5)
alloy belt conveyor to hopper (1)
flux belt conveyor to hopper (6)
carbon belt conveyor to hopper (1)

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

5. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. 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 on a daily basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information

for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as result of an inspection, was no implemented.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitation:

   There shall be no visible particulate emissions from the baghouse exhaust stack.

   There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

   Applicable Compliance Method:

   If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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").

   b. Emission Limitation:

   PM/PM_{10} emissions from baghouse 11 shall not exceed 1.40 pounds per hour, 0.0022 grain per dry standard foot of exhaust gases and 6.13 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with the hourly and grains per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

   The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

   c. Emission Limitation:

   Fugitive PM emissions shall not exceed 0.60 ton per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   Compliance with the fugitive PM emission limitation shall be determined by emission factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to

Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. This emission limitation was based on a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions shall not exceed 0.22 ton per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by emission factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. This emission limitation was based on a 94% overall control efficiency for PM.

2. The permittee shall conduct, or have conducted, emission testing for baghouse 11 in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later that 180 days after initial startup of the unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limits.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A . Alternative U.S.EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency’s refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P921 - Alloy , Flux, and Carbon Railcar / Truck Unloading, Handling and Storage controlled by a baghouse

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - P922 - Limestone and Coke material handling and storage controlled by baghouses 8A and 8B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the baghouse exhaust stack. There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27). See sections A.I.2.a through A.I.2.d below.
OAC rule 3745-31-(10) thru (20)	PM emissions from baghouse 8A and 8B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation. See section A.I.2.b below.
OAC rule 3745-31-(21) thru (27)	Particulate matter emissions of less than ten microns (PM_{10}) from baghouse 8A and 8B each shall not exceed 1.40 pounds per hour, 0.0022 grain per dry standard foot of exhaust gases and 6.13 tons per year as a rolling, 12-month summation. Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.c below.
OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-(10) thru (20) and OAC rules 3745-31-(21) thru (27).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Unloading from trucks to storage pile
Loading form storage piles to front end loader
Loading from front end loader to grizzly feeder 8
Grizzly feeder to conveyor 29
Conveyor 29 to conveyor 30
Conveyor 30 to hopper 19A
Conveyor 30 to hopper 19B

2.b The permittee is required to perform a Best Available Control Technology (BACT) review for PM_{10}. It has been determined that the use of enclosures and a baghouse constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-(10) thru (20) above.

2.c The permittee is required to perform a Lowest Achievable Emission Rate (LAER) review for $PM_{2.5}$ (PM_{10} as a surrogate). The emission limitations based on the LAER requirements are listed under OAC rules 3745-31-(21) thru (27) above. It has been determined that the use of enclosures and a baghouse constitutes LAER for this emissions unit.

2.d The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All	Daily

Notwithstanding the frequency of inspection requirements specified above, the permittee may reduce the frequency of inspections for the material handling operations from daily to weekly if the following conditions are met:

a. for 1 full quarter the inspections of the material handling operations indicate no need for implementing the above-mentioned control measures; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.

The permittee shall revert to daily inspections of the material handling operations if the inspections of the material handling operations indicate the need for implementing the above-mentioned control measures. The permittee may again reduce the frequency of inspections from daily to weekly after obtaining 1 full quarter of inspections of the material handling operations that indicate no need for implementing the above-mentioned control measures.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. 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 and the total number of days where snow and/or ice cover or precipitation were sufficient to not require control measures; and

e. the time of day of each inspection.

The information in section A.III.3.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.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and for any visible fugitive particulate emissions from the area immediately above the capture system serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

   Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

   a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and

   b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

   The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; 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.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Portsmouth 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:

   a. Emission Limitations:

   There shall be no visible particulate emissions from the baghouse exhaust stack.

   There shall be no visible fugitive particulate emissions except for a period of time not to exceed 1 minute in any 60-minute observation period.

   Applicable Compliance Method:

   If required, compliance with the visible particulate emission limitations for the coal grinding and handling process 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").

   b. Emission Limitation:

   PM and PM_{10} emissions from baghouse 8A and 8B each shall not exceed 0.0022 grain per dry standard cubic foot of exhaust gases, 1.40 pounds per hour and 6.13 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   The permittee shall demonstrate compliance with the hourly and grain per dry standard cubic foot allowable PM and PM_{10} emission limitations above based upon the results of the emission testing conducted in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A (see section A.V.2).

   The ton per year limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/hr limitation.

   c. Emission Limitation:

   Fugitive PM emissions from emissions units P918, P919 and P922, combined, shall not exceed 5.19 tons per year as a rolling, 12-month summation.

   Applicable Compliance Method:

   Compliance with the fugitive PM emission limitation shall be determined by emission factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. This emission limitation was based on a 94% overall control efficiency for PM.

d. Emission Limitation:

Fugitive PM_{10} emissions from emissions units P918, P919 and P922, combined, shall not exceed 1.88 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the fugitive PM_{10} emission limitation shall be determined by emission factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters listed in Permit to Install application 07-00587, which was submitted to Ohio EPA on October 4, 2007. This emission limitation was based on a 94% overall control efficiency for PM.

2. The permittee shall conduct, or have conducted, emission testing for baghouses 8A and 8B in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the PM emission limitations.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth 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 Portsmouth 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 Portsmouth Local Air Agency.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - P922 - Limestone and Coke material handling and storage controlled by baghouses 8A and 8B

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T001) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]

The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T001) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T002) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T002) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T003) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T003) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T004) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T004) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T005) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T005) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T006) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T006) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T007) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.23 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]
The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.23 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T007) - 52,834 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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 specified in narrative form following the table.

Operations, Property, and/or Equipment - (T008) - 21,133 gal regenerated hydrochloric acid storage tank with closed vent system

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Hydrochloric acid (HCl) emissions shall not exceed 0.31 ton per year. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCC.
40 CFR Part 63, Subpart CCC	See sections A.I.2.a and A.II.1 below.

2. Additional Terms and Conditions

2.a [40 CFR Part 63, Subpart CCC, Table 1]
The permittee shall comply with any applicable general provisions specified in 40 CFR Part 63, Subpart A for this emissions unit as provided in Table 1 of 40 CFR Part 63, Subpart CCC.

II. Operational Restrictions

1. [40 CFR Part 63.1159(b)]

The permittee of an affected vessel 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 suppressant capture system, ventilated through an air pollution control device.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 63.1162(c)]
   The permittee shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

IV. Reporting Requirements

None

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 method:

   a. Emission Limitation:

      HCl emissions shall not exceed 0.31 ton per year.

      Applicable Compliance Method:

      Compliance shall be demonstrated using maximum throughput and the calculations and emission factors contained in AP-42, Volume I, 5th Edition, Chapter 1, Section 7.1, dated November, 2006.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (T008) - 21,133 gal regenerated hydrochloric acid storage tank

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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