Synthetic Minor Determination and/or ☐ Netting Determination
Permit To Install: "07-00587"

A. Source Description

New Steel International Inc. has proposed the installation of a steel mini-mill in Scioto County.

B. Facility Emissions and Attainment Status

Scioto County is designated as attainment for all criteria pollutants, except for PM2.5. Potential to emit from this proposed installation is over Title V and PSD thresholds for all criteria pollutants except for lead (Pb); therefore this facility is subject to PSD and Title V. New Steel International Inc. is requesting production rate limitation in order for lead (Pb) emissions to remain below PSD levels.

Due to the PM 2.5 non-attainment status of Scioto County, this proposed installation has met LAER requirements for PM10.

C. Source Emissions

The potential emissions from the proposed installation for PM, PM10, SO2, NOx, CO and VOC are greater than the PSD and Title V thresholds. In order to keep the Pb emissions below the thresholds, New Steel International Inc. is requesting a production rate restriction on the Electric Arc Furnaces (P018 and P019) and the Rotary Hearth Furnaces (P001 through P006).

D. Conclusion

The terms and conditions in this Synthetic Minor permit will limit the emissions of Pb below the PSD threshold..

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

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

DATE: 2/14/2008

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

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$80400** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **PCHD** **KY** **WV**

SCIOTO COUNTY

PUBLIC NOTICE PUBLIC HEARING
OHIO ENVIRONMENTAL PROTECTION AGENCY
ISSUANCE OF DRAFT PERMIT TO INSTALL
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION REVIEW
TO NEW STEEL INTERNATIONAL, INC.

Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued, on February 14, 2008, a draft action of Permit to Install (PTI) application number 07-00587 to New Steel International, Inc., Franklin Furnace, Ohio. This draft permit proposes to allow the installation of a new integrated steel mini-mill facility. This facility will be located on Gallia Pike, in Green Township, Scioto County, Ohio.

Air emissions of several pollutants will result. The proposed allowable criteria pollutant air emission rates which result from net increases at the facility are listed below, in tons per year.

Pollutant	Tons/year
PM	1,145.25
PM_{10}	1,009.5
SO_2	3,302.67
NO_x	3,758.10
CO	10,617.58
VOC	288.60
Lead	0.59
Fluoride	82.67
HF	32.16
HCl	268.8
H_2SO_4	79.98
Mercury	0.91

This facility is subject to the applicable provisions of the Non Attainment New Source Review (NNSR) and the Prevention of Significant Deterioration (PSD) regulations as detailed in Ohio Administrative Code (OAC) rules 3745-31-10 through 31-27.

The proposed project exceeds the prevention of significant deterioration (PSD) significant emission rates for NOx and SO2 and, therefore, modeling was required for these pollutants. The pollutants did have impacts above the significant impact levels and were further modeled to determine the impact of the project and other sources on the NAAQS and the PSD increments. The worst case facility impacts were as follows: SO2 24-hour increments were predicted to consume 46% of the available PSD increment. NOx annual increments were predicted to consume 32% of the available PSD increment. PM10 PSD impacts were not evaluated because Scioto County is a non-attainment area. Based on this analysis the project complies with the increment consumption requirements.

The Facility was required by the Federal Land Managers to perform a Class I modeling analysis for SO2 and NOx. This facility has demonstrated that the impact from the new sources is less than the PSD significant impact increment for SO2 and NOx, therefore, the impact is insignificant and increment modeling is not required. The maximum change in visibility in a Class I area is 2.87%.

A public hearing and information session on the draft air permit will be held on Thursday, March 20, 2008, at Green Primary School, 535 Junior Furnace / Powellsville Road, Franklin Furnace, Ohio 45629. The information session will commence at 6:00 pm and the public hearing will follow immediately to accept

comments on the draft permit. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments on the draft permit must be received by the close of business on Thursday, March 27, 2008. Comments received after this date will not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to: Cindy Charles, Portsmouth Local Air Agency, 605 Washington St., Third Floor, Portsmouth, Ohio 45662.

Copies of the draft permit, permit application and technical support information may be reviewed and/or copies made by either accessing the Ohio EPA web page at the following web address: http://www.epa.state.oh.us/dapc/ (see featured topics) or by first calling to make an appointment at the Portsmouth Local Air Agency, located at the above address, telephone number (740) 353-5156.

DRAFT PERMIT TO INSTALL 07-00587

Application Number:	07-00587
Facility ID:	0773000215
Permit Fee:	**To be entered upon final issuance**
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 <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., 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 air contaminant source identified in this permit.

New Steel International, Inc. **Facility ID: 0773000215**
PTI Application: 07-00587
Issued: To be entered upon final issuance

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	3302.67
NOx	3758.10
CO	10617.58
VOC	288.60
Lead	0.59
Fluoride	82.67
HF	32.16
HCl	268.80
H_2SO_4	79.98
Hg	0.91

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, 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

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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.

1. [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.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 "Q_i1" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

   The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B001/P001 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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).

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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B001/P001 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after

completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      Hg emissions from the B001/P001 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

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.

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

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

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;
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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

    Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

   The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B002/P002 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B002/P002 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request

based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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 below and establish maximum fuel pollutant input levels according to sections A.II.3.a through A.II.3.c below, as applicable.

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.

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

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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

    Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

   The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B003/P003 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B003/P003 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request

based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      Hg emissions from the B003/P003 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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 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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

    Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

   The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B004/P004 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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).

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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B004/P004 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request

based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      Hg emissions from the B004/P004 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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 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

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

   The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B005/P005 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B005/P005 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request

based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 0.235 pound per million Btu of actual heat input (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu (as a 3-hour average), 112.60 pounds per hour and 460.12 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million Btu (as a 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

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 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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware,

changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

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. 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

6. [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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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

7. The permittee shall submit a signed statement 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.

The signed statement shall be included in each required quarterly report.

8. [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.

9. [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.

10. [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.

11. [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.11.a through A.IV.11.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.

12. [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.12.a through A.IV.12.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.12.a through A.IV.12.d above.

13. [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.13.a through A.IV.13.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.

14. [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.13.a through A.IV.13.i above and the information required in sections A.IV.14.a through A.IV.14.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.

15. [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.13.a through A.IV.13.i above and the information required in sections A.IV.15.a through A.IV.15.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.

V. Testing Requirements

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

Within 60 days of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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).

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, 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

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B001/P001 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this

scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      Hg emissions from the B006/P006 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.f.) 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, 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 Recordkeeping 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

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. See section A.I.2.b below.
OAC rule 3745-31-28	PM emissions shall not exceed 0.025 pound per million Btu heat

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.

1. [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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

    Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

      iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 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 Limitation:

SO2 emissions from the B001/P001 exhaust stack shall not exceed 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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").

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B001/P001 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of

the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

Hg emissions from the B001/P001 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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”).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B002/P002 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this

scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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”).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B003/P003 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of

the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

Hg emissions from the B003/P003 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 B004/P004 exhaust stack shall not exceed 10.87 pounds per hour and 42.84 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”).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B004/P004 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of

the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

Hg emissions from the B004/P004 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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”).

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B005/P005 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this

scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

      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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 1.36 pounds per hour and 5.36 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 10.87 pounds per hour and 42.84 tons per year. 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. 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.
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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.235 pound per million Btu (as a 3-hour average), 141.17 pounds per hour and 515.07 tons per year as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 0.188 pound per million Btu of actual heat input (as a 3-hour average), 112.60 pounds per hour and 460.12 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 3-hour average), 220.0 pounds per hour 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 0.0056 pound per million Btu of actual heat input (as a 3-hour average), 3.38 pounds per hour and 13.33 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. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 0.188 lb/mmBtu of actual heat input;

SO_2 - use of lime spray dryer with an emission limitation of 0.235 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 0.0056 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 [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.e [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.f [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).

II. Operational Restrictions

1. The maximum throughput for this emissions unit 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.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 "Q_i" for

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 paragraphs (c)(2)(i) through (iii) of this section.

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

ii. During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (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;

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 paragraphs (c)(3)(i) through (iii) of this section.

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

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

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

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

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

III. Monitoring and/or Recordkeeping Requirements

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

   Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system, designed to ensure continuous valid and representative readings of SO_2 emissions 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 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.

3. [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).

4. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions 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.

5. [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.

6. [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).

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

Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions 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.

8. [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.

9. [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).

10. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

Within 180 days of the effective date of this permit, 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.

11. [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.

12. [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

Within 60 days of the effective date of this permit or modification to the system, 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).

13. [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.

14. [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.

15. 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.

16. [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.

17. [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.17.a through A.III.17.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.17.a.1 and A.III.17.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.17.a.2.i through A.III.17.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.17.b and A.III.17.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.17.b.1 or A.III.17.b.2 below.

1. if sampling from a belt (or screw) feeder, collect fuel samples according to sections A.III.17.b.1.i and A.III.17.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.17.b.2.i through A.III.17.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.17.c.1 through A.III.17.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.17.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.17.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.

18. [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.18.a through A.III.18.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).

19. [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.19.a through A.III.19.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.

20. [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.

21. [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.21.a through A.III.21.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.

22. 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.

23. 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.

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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware,

changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;

iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

The signed statement shall be included in each required quarterly report.

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 throughput 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 of the effective date of this permit, 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 141.17 pounds per hour, 0.235 pound per million Btu of actual heat input (as a 3-hour average) and 515.07 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 112.60 pounds per hour, 0.188 pound per million Btu of actual heat input (as a 3-hour average) and 460.12 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 3-hour average), 220.0 pounds per hour 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 3.38 pounds per hour, 0.0056 lb/mmBtu of actual heat input and 13.33 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 1.36 pounds per hour and 5.36 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 10.87 pounds per hour and 42.84 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").

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, 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
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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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(C)	Mercury (Hg) emissions from B006/P006 exhaust stack shall not exceed 0.0014 pound per hour and 11 pounds per rolling 12-month period.

2. Additional Terms and Conditions

2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of

the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

i. the facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits;

ii. in the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units;

iii. an evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party;

iv. the additional emissions will not result in the violation of non Hg emission limitations;

v. the facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit; and

vi. the emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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:

Hg emissions from the B006/P006 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 A.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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 emission

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 emission

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 emission

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.

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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 may be determined by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(24,000 gal/min)(7) x (0.0005 /100) = 0.84 gal/min or 190.78 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 1500 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour. Mercury (Hg) emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. See sections A.I.2.b and A.II.5 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. Sulfur dioxide (SO2) emissions shall not exceed 31.68 pounds per hour and 105.82 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.c 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.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) 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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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	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. 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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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} , 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 0.33 lb/ton of steel

SO_2 - Use of an emission limitation of 0.17 lb/ton of steel

VOC - Use of DEC system with an emission limitation of 0.076 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 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 monitor the baghouse control system and maintain records in accordance with the following requirements.

   The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

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 that the purchase of excessively oily scrap and other combustible material will 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.

4. The following standards are requirements of the 40 CFR Part 60, Subpart Aaa (The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.), BACT and BAT. Visible emissions shall not exceed the following limitations as a 6-minute average:

   a. 3 percent opacity from the baghouse exit; and

   b. 6 percent opacity from the meltshop [Note: This limitation is more restrictive than the NSPS limitation which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s)].

5. No more than 15%, by weight, of the scrap fed to the EAF will be mercury containing scrap, on a daily basis. Based upon the results of performance testing, the percent feed rate may be adjusted.

III. Monitoring and/or Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #12 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

      The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be

determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.11 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;

ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;

iii. operation of the bag leak detection system including quality assurance procedures;

iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and

v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:

a. The permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The monitoring device may be installed in any appropriate location in the EAF ducts prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. The pressure determined during the most recent compliance demonstration shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of the 15-minute integrated average of the pressure whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

b. The permittee shall check and record on a once-per-shift basis the furnace static pressure and either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or (2) install, calibrate and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood. The monitoring device may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of plus or minus 10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The Ohio EPA, DAPC may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60. The values of these parameters, as determined during the most recent demonstration of compliance, shall be maintained at the appropriate levels for each applicable period. Operation at other than baseline values will be considered by the Ohio EPA, DAPC to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of these parameters whenever the permittee can demonstrate to the Agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable.

c. The permittee shall perform and maintain records of the monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

d. Upon approval by the U.S. EPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.3.a, A.III.3.b and A.III.3.c above.

8. 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. The permittee shall determine and record the percent, by weight, of mercury containing scrap charged to the EAF, on a daily basis.

9. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

   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.

10. [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 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.

11. [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 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).

12. 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.

13. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the static pressure values in the EAF established in section A.III.7.b above and either operation of control system fan motor amperes at values exceeding plus 15 percent of the values established under section A.III.7.b above or operation at flow rates lower than those established under section A.III.7.b above.

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:

   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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
      iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

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

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:

   Hg emissions from the EAF shall not exceed 0.13 pound per hour.

   Applicable Compliance Method:

   Emission factor for mercury 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 = 0.13 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

d. Emission Limitation:

Hg emissions from the EAF shall not exceed 0.44 ton per year.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual mercury 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. 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.

Applicable Compliance Method:

e. 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.

f. 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.

g. Emission Limitation:

SO2 emissions from the EAF shall not exceed 31.68 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 0.096 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

SO2 emissions from the EAF shall not exceed 105.82 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 0.096 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:

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 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. 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 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:

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).

l. 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).

m. 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) .

n. 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.

o. 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).

p. 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.

q. 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.

r. Emission Limitation:

SO2 emissions shall not exceed 54.78 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:

SO2 emissions shall not exceed 182.98 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.

t. Emission Limitation:

NOx emissions shall not exceed 109.56 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:

NOx emissions shall not exceed 365.97 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.

v. 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.

w. 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.

x. Emission Limitation:

VOC emissions shall not exceed 25.05 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.

y. Emission Limitation:

VOC emissions shall not exceed 83.68 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.

z. 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.

aa. 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.

bb. 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”).

cc. Emission Limitation:

Hg emissions shall not exceed 0.13 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 = 0.13 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

dd. Emission Limitation:

Hg emissions shall not exceed 0.44 ton per year from the baghouse #12 outlet.

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. 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.

ee 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.

ff. 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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of this permit 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound. Mercury (Hg) emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. See sections A.I.2.b and A.II.5 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 #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 31.68 pounds per hour and 105.82 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.c 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.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) 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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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	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 #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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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 0.33 lb/ton of steel

SO_2 - Use of an emission limitation of 0.17 lb/ton of steel

VOC - Use of DEC system with an emission limitation of 0.076 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 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.

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2. The permittee shall monitor the baghouse control system and maintain records in accordance with the following requirements.

   The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

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 that the purchase of excessively oily scrap and other combustible material will 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.

4. The following standards are requirements of the 40 CFR Part 60, Subpart Aaa (The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.), BACT and BAT. Visible emissions shall not exceed the following limitations as a 6-minute average:

   a. 3 percent opacity from the baghouse exit; and

   b. 6 percent opacity from the meltshop [Note: This limitation is more restrictive than the NSPS limitation which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s)].

5. No more than 15%, by weight, of the scrap fed to the EAF will be mercury containing scrap, on a daily basis. Based upon the results of performance testing, the percent feed rate may be adjusted.

III. Monitoring and/or Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #14 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

      The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be

determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.11 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;

ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;

iii. operation of the bag leak detection system including quality assurance procedures;

iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and

v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:

a. The permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The monitoring device may be installed in any appropriate location in the EAF ducts prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. The pressure determined during the most recent compliance demonstration shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of the 15-minute integrated average of the pressure whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

b. The permittee shall check and record on a once-per-shift basis the furnace static pressure and either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or (2) install, calibrate and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood. The monitoring device may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of plus or minus 10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The Ohio EPA, DAPC may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60. The values of these parameters, as determined during the most recent demonstration of compliance, shall be maintained at the appropriate levels for each applicable period. Operation at other than baseline values will be considered by the Ohio EPA, DAPC to be unacceptable operation and maintenance of the control system. The permittee may petition the Ohio EPA for reestablishment of these parameters whenever the permittee can demonstrate to the Agency's satisfaction that the operating conditions upon which the parameters were previously established are no longer applicable.

c. The permittee shall perform and maintain records of the monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

d. Upon approval by the U.S. EPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.3.a, A.III.3.b and A.III.3.c above.

8. 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. The permittee shall determine and record the percent, by weight, of mercury containing scrap charged to the EAF, on a daily basis.

9. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

   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.

10. [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 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.

11. [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 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).

12. 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.

13. 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the static pressure values in the EAF established in section A.III.7.b above and either operation of control system fan motor amperes at values exceeding plus 15 percent of the values established under section A.III.7.b above or operation at flow rates lower than those established under section A.III.7.b above.

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:

   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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
      iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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.

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

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:

   Hg emissions from the EAF shall not exceed 0.13 pound per hour.

   Applicable Compliance Method:

   Emission factor for mercury 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 = 0.13 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

d. Emission Limitation:

Hg emissions from the EAF shall not exceed 0.44 ton per year.

Applicable Compliance Method:

The emission factor of 0.0004 lb Hg/ton of steel was used to determine annual mercury 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. 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.

Applicable Compliance Method:

e. 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.

f. 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.

g. Emission Limitation:

SO2 emissions from the EAF shall not exceed 31.68 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 0.096 lb/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

h. Emission Limitation:

SO2 emissions from the EAF shall not exceed 105.82 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 0.096 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:

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 lbs/ton multiplied by the maximum hourly steel process rate of the emissions unit (330 tons per hour).

j. 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 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:

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).

l. 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).

m. 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) .

n. 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.

o. 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).

p. 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.

q. 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.

r. Emission Limitation:

SO2 emissions shall not exceed 54.78 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:

SO2 emissions shall not exceed 182.98 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.

t. Emission Limitation:

NOx emissions shall not exceed 109.56 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:

NOx emissions shall not exceed 365.97 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.

v. 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.

w. 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.

x. Emission Limitation:

VOC emissions shall not exceed 25.05 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.

y. Emission Limitation:

VOC emissions shall not exceed 83.68 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.

z. 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.

aa. 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.

bb. 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”).

cc. Emission Limitation:

Hg emissions shall not exceed 0.13 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 = 0.13 lb Hg/hr.

Compliance shall be based upon the results of the emission testing specified in section A.V.2

dd. Emission Limitation:

Hg emissions shall not exceed 0.44 ton per year from the baghouse #14 outlet.

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. 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.

ee 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.

ff. 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, lead (Pb), mercury (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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of this permit 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour. The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	rolling, 12-month summation.
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 1.31 pounds per hour and 4.37 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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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 0.33 lb/ton of steel;

SO_2 - Use of an emission limitation of 0.17 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.076 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 Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #12 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

   The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

   If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.10 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

   a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

   b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

   c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

   d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental

Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;
ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
iii. operation of the bag leak detection system including quality assurance procedures;
iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the baghouse control system and maintain records in accordance with the following requirements.

The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

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.

9. [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 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.

10. [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 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).

11. 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.

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:

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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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. 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 31.68 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 105.82 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 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 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 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 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 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 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 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 54.78 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 182.98 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 109.56 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 365.97 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 25.05 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 83.68 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 0.13 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 = 0.13 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 0.44 ton per year from the baghouse #12 outlet.

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. 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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of emissions unit P018 of this permit 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #1 and LMF #1 & #2) shall not exceed 0.06 pound per hour. The emissions from emissions units P018, P020 and P021 that vent to the #12 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. 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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 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 1.31 pounds per hour and 4.37 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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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 0.33 lb/ton of steel;

SO_2 - Use of an emission limitation of 0.17 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.076 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 Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #12 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

      The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

   If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.10 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

   a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

   b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

   c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

   d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental

Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;
ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
iii. operation of the bag leak detection system including quality assurance procedures;
iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an

alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the baghouse control system and maintain records in accordance with the following requirements.

   The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

   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.

9. [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 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.

10. [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 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).

11. 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.

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:

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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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. 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 31.68 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 105.82 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 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 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 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 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 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 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 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 54.78 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 182.98 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 109.56 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 365.97 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 25.05 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 83.68 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 0.13 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 = 0.13 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 0.44 ton per year from the baghouse #12 outlet.

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. 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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound per hour. The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	rolling, 12-month summation.
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 1.31 pounds per hour and 4.37 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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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 0.33 lb/ton of steel;

SO_2 - Use of raw materials that minimize the introduction of sulfur into the furnace with an emission limitation of 0.17 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.076 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 Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #14 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

   If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.10 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

   a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

   b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

   c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

   d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for

approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;
ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
iii. operation of the bag leak detection system including quality assurance procedures;
iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the baghouse control system and maintain records in accordance with the following requirements.

The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

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.

9. [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 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.

10. [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 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).

11. 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.

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:

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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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. 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 31.68 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 105.82 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 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 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 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 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 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 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 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 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 54.78 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 182.98 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 109.56 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 365.97 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 25.05 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 83.68 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 0.13 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 = 0.13 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 0.44 ton per year from the baghouse #14 outlet.

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. 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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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)	Lead (Pb) emissions (EAF #2 and LMF #3 & #4) shall not exceed 0.06 pound per hour. The emissions from emissions units P019, P022 and P023 that vent to the #14 baghouse shall not exceed the following: Pb emissions shall not exceed 0.06 pound per hour. Hg emissions shall not exceed 0.13 pound per hour and 0.44 ton per year. 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).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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.
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 1.31 pounds per hour and 4.37 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 54.78 pounds per hour and 182.98 tons per year as a rolling, 12-month summation;

NOx emissions shall not exceed 109.56 pounds per hour and 365.97 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 25.05 pounds per hour and 83.68 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 0.33 lb/ton of steel;

SO_2 - Use of raw materials that minimize the introduction of sulfur into the furnace with an emission limitation of 0.17 lb/ton of steel;

VOC - Use of DEC system with an emission limitation of 0.076 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 Recordkeeping Requirements

1. The following are requirements of the 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible emissions from the #14 baghouse shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for point(s) where the greatest opacity visible emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the limitation for visible particulate emissions.

   The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

2. In accordance with 40 CFR Part 60, Subpart AAa, observations of the opacity of the visible emissions from the shop shall be performed by a certified visible emission observer as follows:

   a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. The owner or operator shall maintain records of all shop observations made in accordance with the above requirements. The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

3. [40 CFR Part 60.273a(e)

   If the permittee elects not to install and operate a continuous opacity monitoring system as described in section A.III.10 below, a bag leak detection system must be installed and continuously operated on all single-stack fabric filters. In addition, the permittee shall meet the visible emissions observation requirements in section A.III.1 above. The bag leak detection system must meet the specifications and requirements of sections A.III.3.a through A.III.3.h below:

   a. the bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less;

   b. the bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. using a strip chart recorder or a data logger.);

   c. the bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to Section A.III.d below, and the alarm must be located such that it can be heard by the appropriate plant personnel;

   d. for each bag leak detection system required by Section A.III.3 of this permit, the permittee shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in Sections A.III.3.d.i through A.III.3.d.v below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency

guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

i. installation of the bag leak detection system;
ii. initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
iii. operation of the bag leak detection system including quality assurance procedures;
iv. how the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
v. how the bag leak detection system output shall be recorded and stored.

e. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting sensitivity (range) and the averaging period fo the device, and establishing the alarm set points and the alarm delay time (if applicable);

f. Following the initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in Sections A.III.3.f.i and A.III.3.f.ii below.

i. once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under Section A.III.d above.

ii. if opacities greater than zero percent are observed over four consecutive 15-section observations during the daily opacity observations required under Section A.III.1 above and the alarm on the bag leak detection system does not sound, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

g. For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber;

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

4. [40 CFR Part 60.273a(f)

For each bag leak detection system installed according to Section A.III.3 above, the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided under Section A.III.5 below, the cause of the alarm must be

alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

g. shutting down the process producing the particulate emissions.

5. [40 CFR Part 60.273a(g)

In approving the site-specific monitoring plan required in Section A.III. above, the Administrator or delegated authority may allow the permittee more than 3 hours to alleviate specific conditions that cause an alarm if the permittee identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

6. [40 CFR Part 60.276a(h)

The permittee shall maintain the following records for each bag leak detection system required under Section A.III.3 above.

a. records of the bag leak detection system output;

b. records of the bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

c. an identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

7. The permittee shall monitor the baghouse control system and maintain records in accordance with the following requirements.

   The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g.), presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

8. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

   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.

9. [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 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.

10. [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 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).

11. 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.

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:

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. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
iv. the excess emissions report (EER), i.e., a summary of any exeedances during the calendar quarter, as specified 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 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. 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 31.68 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 105.82 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 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 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 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 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 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 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 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 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 54.78 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 182.98 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 109.56 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 365.97 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 25.05 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 83.68 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 0.13 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 = 0.13 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 0.44 ton per year from the baghouse #14 outlet.

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. 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.

During the particulate emission testing, the permittee shall obtain the following additional information:

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 section A.III.7.a of 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(87,775 gal/min) x (0.0005/100) = 0.439 gal/min or 99.71 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 3000 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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. 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 when the emissions unit is in operation.

III. Monitoring and/or Recordkeeping 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.

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).

   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 40 CFR Part 51, Appendix M, Method 202.

   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

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

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).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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. 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 when the emissions unit is in operation.

III. Monitoring and/or Recordkeeping 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.

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).

   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 40 CFR Part 51, Appendix M, Method 202.

   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

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

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).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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. 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 when the emissions unit is in operation.

III. Monitoring and/or Recordkeeping 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.

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).

   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 40 CFR Part 51, Appendix M, Method 202.

   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

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

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).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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. 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 when the emissions unit is in operation.

III. Monitoring and/or Recordkeeping 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.

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).

   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 40 CFR Part 51, Appendix M, Method 202.

   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

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

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).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 9.35 pounds per hour, 0.07 lb/mmBtu and 40.95 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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)	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 Recordkeeping 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 9.35 pounds per hour, 0.07 lb/MMBtu, and 40.95 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 9.35 pounds per hour, 0.07 lb/mmBtu and 40.95 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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)	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 Recordkeeping 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 9.35 pounds per hour, 0.07 lb/MMBtu, and 40.95 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	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. [40 CFR Part 63.1160(b)(1)]
The permittee shall comply with the operation and maintenance requirements specified in 40 CFR Part 63.6(e) of Subpart A.

2. [40 CFR 63.1164(c)]
40 CFR Part 63.6(e) requires the permittee of an affected emissions unit to operate and maintain each affected emissions unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown and malfunction plan.

3. [40 CFR 63.1160(b)(2)(ii) and (b)(2)(iii)]
The permittee shall adhere to the operation and maintenance plan for each emission control device as required by 40 CFR 63.1160(b)(2), sections A.II.3.a and A.II.3.b as listed below, and sections A.III.7, A.III.8, A.III.9 and A.III.10:

a. the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge

pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans; and

b. the scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

4. 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 Recordkeeping Requirements

1. [40 CFR 63.1162(a)(2)]
The permittee shall operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values specified in section A.II.4 will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

2. [40 CFR 63.1162(a)(5)]
Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions, but not less frequently than once per year.

3. [40 CFR Part 63.1165(a)]
The permittee shall maintain records for 5 years from the date of each record of:

a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., for process equipment);

b. the occurrence and duration of each malfunction of the air pollution control equipment;

c. the maintenance performed on the air pollution control equipment;

d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown,

and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan (this information can be recorded in a checklist or similar form);

f. all required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

g. all results of initial or subsequent performance tests;

h. if the permittee has been granted a waiver from the record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

i. if the permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and Administrator's approval or disapproval;

j. all documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

k. records of any applicability determination, including supporting analyses.

4. [40 CFR 63.1165(b)(1)]
The permittee shall maintain records for 5 years from the date of each record of:

a. scrubber makeup water flow rate data and recirculation water flow rate data;

b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

c. each maintenance inspection and repair, replacement, or other corrective action.

5. [40 CFR 63.1165(b)(3)]
The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator and the Portsmouth Local Air Agency for the life of the affected source or until the source is no longer subject to the provisions of the Subpart. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the plan on record to be made available for inspection by the Administrator and the Portsmouth Local Air Agency for a period of 5 years after each revision to the plan.

6. [40 CFR 63.1165(c)]
General records and 40 CFR Part 63, Subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

7. [40 CFR 63.1160(b)(2)(i)]
The permittee shall monitor and record the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.

8. [40 CFR 63.1160(b)(2)(iv) and (b)(2)(v)]
Inspection of each scrubber shall be conducted at intervals of no less than 3 months and shall include the following:

   a. cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

   b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

   c. repair or replacement of droplet eliminator elements as needed;

   d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

   e. adjustment of damper settings for consistency with the required air flow.

   If the scrubber is not equipped with a viewpoint or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator and the Portsmouth Local Air Agency may be used.

9. [40 CFR 63.1160(b)(2)(vi)]
The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

10. [40 CFR 63.1160(b)(2)(vii)]
The permittee shall maintain a record of each inspection, including each item identified in section A.III.8, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

11. 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.

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 section A.III.1; and

    b. the identification of each malfunction of the control or process equipment required in sections A.III.3.a and/or A.III.3.b and the information required in sections A.III.3.c, A.III.3.d, A.III.3.e, and A.III.4.c.

    The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in section A.III.7.

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. [40 CFR 63.1164(a)]
As required by 40 CFR Part 63.10(d)(2), the permittee of an affected emissions unit shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

4. [40 CFR 63.1164(c)(2)]
If actions taken by the permittee during a startup, shutdown, or malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

5. [40 CFR 63.1164(c)(3)]
Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

6. 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 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 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.

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 sections A.V.2 through A.V.8).

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. The permittee shall conduct, or have conducted, emission testing for the Push-Pull Pickle line baghouse exhaust , and wet scrubber #1 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.

[40 CFR 63.1161(a)(1)]
Following approval of the site-specific test plan, the permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass emission rates of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

Emission testing shall be conducted to demonstrate compliance with the PM emission limitations from baghouse 16.

3. [40 CFR 63.1161(a)(2)]
Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

4. [40 CFR 63.1161(a)(3)]
Compliance is achieved if either the average collection efficiency as determined by the HCl mass emission rates at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

5. [40 CFR 63.1161(b)]
During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per section A.V.3, above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

6. [40 CFR 63.1161(d)(1)]
The following test methods in 40 CFR Part 60, Appendix A shall be used to determine compliance under 40 CFR Parts 63.1157(a), 63.1157(b), 63.1158(a) and 63.1158(b):

a. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

b. Method 2, to determine gas velocity and volumetric flow rate;

c. Method 3, to determine the molecular weight of the stack gas;

d. Method 4, to determine the moisture content of the stack gas;

e. Method 5, to determine the particulate emission rate; and

f. Method 26A, ``Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources--Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

C(ppmv) = 0.659 C(mg/dscm)

where:

C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

7. [40 CFR 63.1161(d)(2)]
   The permittee may use equivalent alternative measurement methods approved by the Administrator and Portsmouth Local Air Agency.

8. [40 CFR 63.1163(d)]
   The permittee shall notify the Administrator and the Portsmouth Local Air Agency in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator and the Portsmouth Local Air Agency to review and approve the site-specific test plan required in 40 CFR Part 63.7(c) and, if requested by the Administrator and/or the Portsmouth Local Air Agency, to have an observer present during the test.

   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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Nitrogen oxides (NOx) emissions shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation. 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	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. [40 CFR Part 63.1160(b)(1)]
   The permittee shall comply with the operation and maintenance requirements specified in 40 CFR Part 63.6(e) of Subpart A.

2. [40 CFR 63.1164(c)]
   40 CFR Part 63.6(e) requires the permittee of an affected emissions unit to operate and maintain each affected emissions unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

3. [40 CFR 63.1160(b)(2)(ii) and (b)(2)(iii)]
   The permittee shall adhere to the operation and maintenance plan for each emission control device as required by 40 CFR 63.1160(b)(2), sections A.II.3.a and A.II.3.b as listed below, and sections A.III.7, A.III.8, A.III.9 and A.III.10:

   a. the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans; and

   b. the scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

4. 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 Recordkeeping Requirements

1. [40 CFR 63.1162(a)(2)]
   The permittee shall operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values specified in A.II.4 will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

2. [40 CFR 63.1162(a)(5)]
   Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions, but not less frequently than once per year.

3. [40 CFR Part 63.1165(a)]
   The permittee shall maintain records for 5 years from the date of each record of:

   a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., for process equipment);

   b. the occurrence and duration of each malfunction of the air pollution control equipment;

   c. the maintenance performed on the air pollution control equipment;

   d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

   e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent wit the procedures specified in such plan (this information can be recorded in a checklist or similar form);

   f. all required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

   g. all results of initial or subsequent performance tests;

   h. if the permittee has been granted a waiver from the record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

   i. if the permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and Administrator's approval or disapproval;

j. all documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

k. records of any applicability determination, including supporting analyses.

4. [40 CFR 63.1165(b)(1)]
The permittee shall maintain records for 5 years from the date of each record of:

a. scrubber makeup water flow rate data and recirculation water flow rate data;

b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

c. each maintenance inspection and repair, replacement, or other corrective action.

5. [40 CFR 63.1165(b)(3)]
The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator and the Portsmouth Local Air Agency for the life of the affected source or until the source is no longer subject to the provisions of the Subpart. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the plan on record to be made available for inspection by the Administrator and the Portsmouth Local Air Agency for a period of 5 years after each revision to the plan.

6. [40 CFR 63.1165(c)]
General records and 40 CFR Part 63, Subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

7. [40 CFR 63.1160(b)(2)(i)]
The permittee shall monitor and record the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.

8. [40 CFR 63.1160(b)(2)(iv) and (b)(2)(v)]
Inspection of each scrubber shall be conducted at intervals of no less than 3 months and shall include the following:

a. cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

If the scrubber is not equipped with a viewpoint or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator and the Portsmouth Local Air Agency may be used.

9. [40 CFR 63.1160(b)(2)(vi)]
The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

10. [40 CFR 63.1160(b)(2)(vii)]
The permittee shall maintain a record of each inspection, including each item identified in section A.III.8, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

11. 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.

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 section A.III.1; and

b. the identification of each malfunction of the control or process equipment required in sections A.III.3.a and/or A.III.3.b and the information required in sections A.III.3.c, A.III.3.d, A.III.3.e, and A.III.4.c.

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in section A.III.7.

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. [40 CFR 63.1164(a)]
As required by 40 CFR Part 63.10(d)(2), the permittee of an affected emissions unit shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

4. [40 CFR 63.1164(c)(2)]
If actions taken by the permittee during a startup, shutdown, or malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

5. [40 CFR 63.1164(c)(3)]
   Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

6. 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 (see sections A.V.2 through A.V.8).

   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 sections A.V.2 through A.V.8.

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 sections A.V.2 through A.V.8).

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. The permittee shall conduct, or have conducted, emission testing for baghouse 16, and each wet scrubber (wet scrubber 2 & 3) 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.

[40 CFR 63.1161(a)(1)]
Following approval of the site-specific test plan, the permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass emission rates of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

Emission testing shall be conducted to demonstrate compliance with the PM emission limitations from baghouse 16.

3. [40 CFR 63.1161(a)(2)]
Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

4. [40 CFR 63.1161(a)(3)]
Compliance is achieved if either the average collection efficiency as determined by the HCl mass emission rates at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl

exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

5. [40 CFR 63.1161(b)]
During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per section A.V.3, above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

6. [40 CFR 63.1161(d)(1)]
The following test methods in 40 CFR Part 60, Appendix A shall be used to determine compliance under 40 CFR Parts 63.1157(a), 63.1157(b), 63.1158(a) and 63.1158(b):

a. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

b. Method 2, to determine gas velocity and volumetric flow rate;

c. Method 3, to determine the molecular weight of the stack gas;

d. Method 4, to determine the moisture content of the stack gas;

e. Method 5, to determine the particulate emission rate; and

f. Method 26A, ``Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources--Isokinetic Method,'' to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

C(ppmv) = 0.659 C(mg/dscm)

where:

C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

7. [40 CFR 63.1161(d)(2)]
The permittee may use equivalent alternative measurement methods approved by the Administrator and Portsmouth Local Air Agency.

8. [40 CFR 63.1163(d)]
The permittee shall notify the Administrator and the Portsmouth Local Air Agency in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator and the Portsmouth Local Air Agency to review and approve the site-specific test plan required in 40 CFR Part 63.7(c) and, if requested by the Administrator and/or the Portsmouth Local Air Agency, to have an observer present during the test.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Nitrogen oxides (NOx) emissions shall not exceed 3.0 pounds per hour and 13.14 tons per year as a rolling, 12-month summation. 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	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. [40 CFR Part 63.1160(b)(1)]
   The permittee shall comply with the operation and maintenance requirements specified in 40 CFR Part 63.6(e) of Subpart A.

2. [40 CFR 63.1164(c)]
   40 CFR Part 63.6(e) requires the permittee of an affected emissions unit to operate and maintain each affected emissions unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

3. [40 CFR 63.1160(b)(2)(ii) and (b)(2)(iii)]
   The permittee shall adhere to the operation and maintenance plan for each emission control device as required by 40 CFR 63.1160(b)(2), sections A.II.3.a and A.II.3.b as listed below, and sections A.III.7, A.III.8, A.III.9 and A.III.10:

   a. the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans; and

   b. the scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

4. 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 Recordkeeping Requirements

1. [40 CFR 63.1162(a)(2)]
   The permittee shall operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values specified in A.II.4 will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

2. [40 CFR 63.1162(a)(5)]
   Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions, but not less frequently than once per year.

3. [40 CFR Part 63.1165(a)]
   The permittee shall maintain records for 5 years from the date of each record of:

   a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., for process equipment);

   b. the occurrence and duration of each malfunction of the air pollution control equipment;

   c. the maintenance performed on the air pollution control equipment;

   d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

   e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent wit the procedures specified in such plan (this information can be recorded in a checklist or similar form);

   f. all required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

   g. all results of initial or subsequent performance tests;

   h. if the permittee has been granted a waiver from the record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

   i. if the permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and Administrator's approval or disapproval;

j. all documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

k. records of any applicability determination, including supporting analyses.

4. [40 CFR 63.1165(b)(1)]
The permittee shall maintain records for 5 years from the date of each record of:

a. scrubber makeup water flow rate data and recirculation water flow rate data;

b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

c. each maintenance inspection and repair, replacement, or other corrective action.

5. [40 CFR 63.1165(b)(3)]
The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator and the Portsmouth Local Air Agency for the life of the affected source or until the source is no longer subject to the provisions of the Subpart. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the plan on record to be made available for inspection by the Administrator and the Portsmouth Local Air Agency for a period of 5 years after each revision to the plan.

6. [40 CFR 63.1165(c)]
General records and 40 CFR Part 63, Subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

7. [40 CFR 63.1160(b)(2)(i)]
The permittee shall monitor and record the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.

8. [40 CFR 63.1160(b)(2)(iv) and (b)(2)(v)]
Inspection of each scrubber shall be conducted at intervals of no less than 3 months and shall include the following:

a. cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

If the scrubber is not equipped with a viewpoint or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator and the Portsmouth Local Air Agency may be used.

9. [40 CFR 63.1160(b)(2)(vi)]
The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

10. [40 CFR 63.1160(b)(2)(vii)]
The permittee shall maintain a record of each inspection, including each item identified in section A.III.8, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

11. 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.

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 section A.III.1; and

b. the identification of each malfunction of the control or process equipment required in sections A.III.3.a and/or A.III.3.b and the information required in sections A.III.3.c, A.III.3.d, A.III.3.e, and A.III.4.c.

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in section A.III.7.

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. [40 CFR 63.1164(a)]
As required by 40 CFR Part 63.10(d)(2), the permittee of an affected emissions unit shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

4. [40 CFR 63.1164(c)(2)]
If actions taken by the permittee during a startup, shutdown, or malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

5. [40 CFR 63.1164(c)(3)]
   Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

6. 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 (see sections A.V.2 through A.V.8).

   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 sections A.V.2 through A.V.8.

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 sections A.V.2 through A.V.8).

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. The permittee shall conduct, or have conducted, emission testing for baghouse 16, and each wet scrubber (wet scrubber 2 & 3) 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.

[40 CFR 63.1161(a)(1)]
Following approval of the site-specific test plan, the permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass emission rates of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

Emission testing shall be conducted to demonstrate compliance with the PM emission limitations from baghouse 16.

3. [40 CFR 63.1161(a)(2)]
Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

4. [40 CFR 63.1161(a)(3)]
Compliance is achieved if either the average collection efficiency as determined by the HCl mass emission rates at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl

exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

5. [40 CFR 63.1161(b)]
During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per section A.V.3, above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

6. [40 CFR 63.1161(d)(1)]
The following test methods in 40 CFR Part 60, Appendix A shall be used to determine compliance under 40 CFR Parts 63.1157(a), 63.1157(b), 63.1158(a) and 63.1158(b):

a. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

b. Method 2, to determine gas velocity and volumetric flow rate;

c. Method 3, to determine the molecular weight of the stack gas;

d. Method 4, to determine the moisture content of the stack gas;

e. Method 5, to determine the particulate emission rate; and

f. Method 26A, ``Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources--Isokinetic Method,'' to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

C(ppmv) = 0.659 C(mg/dscm)

where:

C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

7. [40 CFR 63.1161(d)(2)]
The permittee may use equivalent alternative measurement methods approved by the Administrator and Portsmouth Local Air Agency.

8. [40 CFR 63.1163(d)]
The permittee shall notify the Administrator and the Portsmouth Local Air Agency in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator and the Portsmouth Local Air Agency to review and approve the site-specific test plan required in 40 CFR Part 63.7(c) and, if requested by the Administrator and/or the Portsmouth Local Air Agency, to have an observer present during the test.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 - P034 - 12 natural gas fired hydrogen annealing furnaces

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 (27).
OAC rules 3745-31-10 thru 20	Particulate matter (PM) emissions shall not exceed 0.44 pound per hour and 1.93 tons per year as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 4.82 lbs/hr and 21.11 tons/year as a rolling, 12-month summation. Nitrogen oxide (NOx) emissions shall not exceed 2.87 lbs/hr and 12.57 tons/year as a rolling, 12-month summation. Volatile organic compounds (VOC) emissions shall not exceed 0.32 lb/hr and 1.40 tons/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) shall not exceed 0.44 pound per hour and 1.93 tons per year as a rolling, 12-month summation. See section A.I.2.b 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).

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).

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 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:

II. Operational Restrictions

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

III. Monitoring and/or Recordkeeping 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 0.44 pound per hour and 1.93 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 (0.057 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:

CO emissions shall not exceed 4.82 pounds per hour and 21.11 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 84.0 pounds CO / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.057 mmscf/hr). The CO 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.

d. Emission Limitation:

NO_x emissions shall not exceed 2.87 pounds per hour and 12.57 tons per year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 50.0 pounds NOx / mmscf of natural gas by the unit's maximum hourly natural gas consumption rate (0.057 mmscf/hr). The NOx 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.

e. Emission Limitation:

VOC emissions shall not exceed 0.32 pound per hour and 1.40 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 (0.057 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.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 - P034 - 12 natural gas fired hydrogen annealing furnaces

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.a below.
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	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. [40 CFR Part 63.1159(a)]
The permittee shall must operate the affected plant at all times while in production in a manner that minimizes the proportion of excess air fed to the process and maximizes the process offgas temperature consistent with producing usable regenerated acid or iron oxide.

2. [40 CFR Part 63.1160(b)(1)]
The permittee shall comply with the operation and maintenance requirements specified in 40 CFR Part 63.6(e) of Subpart A.

3. [40 CFR 63.1160(b)(2)(ii) and (b)(2)(iii)]
The permittee shall adhere to the operation and maintenance plan for each emission control device as required by 40 CFR 63.1160(b)(2), sections A.II.3.a and A.II.3.b as listed below, and sections A.III.7, A.III.8, A.III.9 and A.III.10:

   a. the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans; and

   b. the scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

4. [40 CFR Part 63.1160(b)(3)]
The permittee shall develop and implement a written maintenance program. The program shall require:

   a. Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

   b. Initiation of procedures for appropriate and timely repair, replacement, or other corrective action within 1 working day of detection; and

   c. Maintenance of a daily record, signed by a responsible maintenance official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

5. [40 CFR 63.1164(c)]
40 CFR Part 63.6(e) requires the permittee of an affected emissions unit to operate and maintain each affected emissions unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

6. 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 Recordkeeping Requirements

1. [40 CFR 63.1162(a)(2)]
The permittee shall operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and recirculation water flow rate. These flow rates

must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values specified in A.II.4 will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

2. [40 CFR 63.1162(a)(5)]
Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions, but not less frequently than once per year.

3. [40 CFR Part 63.1165(a)]
The permittee shall maintain records for 5 years from the date of each record of:

a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., for process equipment);

b. the occurrence and duration of each malfunction of the air pollution control equipment;

c. the maintenance performed on the air pollution control equipment;

d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent wit the procedures specified in such plan (this information can be recorded in a checklist or similar form);

f. all required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

g. all results of initial or subsequent performance tests;

h. if the permittee has been granted a waiver from the record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether

a source is meeting the requirements for a waiver of record keeping or reporting requirements;

i. if the permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and Administrator's approval or disapproval;

j. all documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

k. records of any applicability determination, including supporting analyses.

4. [40 CFR 63.1165(b)(1)]
The permittee shall maintain records for 5 years from the date of each record of:

a. scrubber makeup water flow rate data and recirculation water flow rate data;

b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

c. each maintenance inspection and repair, replacement, or other corrective action.

5. [40 CFR 63.1165(b)(3)]
The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator and the Portsmouth Local Air Agency for the life of the affected source or until the source is no longer subject to the provisions of the Subpart. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the plan on record to be made available for inspection by the Administrator and the Portsmouth Local Air Agency for a period of 5 years after each revision to the plan.

6. [40 CFR 63.1165(c)]
General records and 40 CFR Part 63, Subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

7. [40 CFR 63.1160(b)(2)(i)]
The permittee shall monitor and record the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.

8. [40 CFR Part 63.1160(b)(2)(iv) and (b)(2)(v)]
Inspection of each scrubber shall be conducted at intervals of no less than 3 months and shall include the following:

a. cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

If the scrubber is not equipped with a viewpoint or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator and the Portsmouth Local Air Agency may be used.

9. [40 CFR 63.1160(b)(2)(vi)]
The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

10. [40 CFR 63.1160(b)(2)(vii)]
The permittee shall maintain a record of each inspection, including each item identified in section A.III.8, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

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 section A.III.1; and

b. the identification of each malfunction of the control or process equipment required in sections A.III.3.a and/or A.III.3.b and the information required in sections A.III.3.c, A.III.3.d, A.III.3.e, and A.III.4.c.

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in section A.III.7.

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. [40 CFR 63.1164(a)]
   As required by 40 CFR Part 63.10(d)(2), the permittee of an affected emissions unit shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

4. [40 CFR 63.1164(c)(2)]
   If actions taken by the permittee during a startup, shutdown, or malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

5. [40 CFR 63.1164(c)(3)]
   Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

V. Testing Requirements

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

   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 sections A.V.2 through A.V.9.

   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 Part 63.1161 (see sections A.V.2 through A.V.9).

2. The permittee shall conduct, or have conducted, emission testing for the scrubber 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.

[40 CFR 63.1161(a)(1)]
Following approval of the site-specific test plan, the permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass emission rates of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

3. [40 CFR 63.1161(a)(2)]
   Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

4. [40 CFR 63.1161(a)(3)]
   Compliance is achieved if either the average collection efficiency as determined by the HCl mass emission rates at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

5. [40 CFR 63.1161(b)]
   During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per section A.V.3, above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

6. [40 CFR 63.1161(c)(1)]
   During the performance test for hydrochloric acid regeneration plants, the permittee shall establish site-specific operating parameter values for the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in 40 CFR Part 63.1162(b)(1). During the emission test, each operating parameter must be monitored and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes for parameters that are monitored continuously. Amount of iron in the spent pickle liquor shall be determined for each run by sampling the liquor every 15 minutes and analyzing a composite of the samples. The permittee shall determine the compliant monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration per 40 CFR 63.1161(a)(2). The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish alternative compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

7. The following test methods in 40 CFR Part 60, Appendix A shall be used to determine compliance under 40 CFR Parts 63.1157(a), 63.1157(b), 63.1158(a), and 63.1158(b):

a. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

b. Method 2, to determine gas velocity and volumetric flow rate;

c. Method 3, to determine the molecular weight of the stack gas;

d. Method 4, to determine the moisture content of the stack gas; and

e. Method 26A, ``Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources--Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

C(ppmv) = 0.659 C(mg/dscm)

where:

C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

8. [40 CFR 63.1161(d)(2)]
The permittee may use equivalent alternative measurement methods approved by the Administrator and Portsmouth Local Air Agency.

9. [40 CFR 63.1163(d)]
The permittee shall notify the Administrator and the Portsmouth Local Air Agency in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator and the Portsmouth Local Air Agency to review and approve the site-specific test plan required in 40 CFR Part 63.7(c) and, if requested by the Administrator and/or the Portsmouth Local Air Agency, to have an observer present during the test.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	See section A.I.2.a below.
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	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. [40 CFR Part 63.1159(a)]
The permittee shall must operate the affected plant at all times while in production in a manner that minimizes the proportion of excess air fed to the process and maximizes the process offgas temperature consistent with producing usable regenerated acid or iron oxide.

2. [40 CFR Part 63.1160(b)(1)]
The permittee shall comply with the operation and maintenance requirements specified in 40 CFR Part 63.6(e) of Subpart A.

3. [40 CFR 63.1160(b)(2)(ii) and (b)(2)(iii)]
The permittee shall adhere to the operation and maintenance plan for each emission control device as required by 40 CFR 63.1160(b)(2), sections A.II.3.a and A.II.3.b as listed below, and sections A.III.7, A.III.8, A.III.9 and A.III.10:

   a. the permittee shall follow the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans; and

   b. the scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

4. [40 CFR Part 63.1160(b)(3)]
The permittee shall develop and implement a written maintenance program. The program shall require:

   a. Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

   b. Initiation of procedures for appropriate and timely repair, replacement, or other corrective action within 1 working day of detection; and

   c. Maintenance of a daily record, signed by a responsible maintenance official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

5. [40 CFR 63.1164(c)]
40 CFR Part 63.6(e) requires the permittee of an affected emissions unit to operate and maintain each affected emissions unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

6. 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 Recordkeeping Requirements

1. [40 CFR 63.1162(a)(2)]
The permittee shall operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and recirculation water flow rate. These flow rates

must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values specified in A.II.4 will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

2. [40 CFR 63.1162(a)(5)]
Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions, but not less frequently than once per year.

3. [40 CFR Part 63.1165(a)]
The permittee shall maintain records for 5 years from the date of each record of:

a. the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., for process equipment);

b. the occurrence and duration of each malfunction of the air pollution control equipment;

c. the maintenance performed on the air pollution control equipment;

d. actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

e. all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent wit the procedures specified in such plan (this information can be recorded in a checklist or similar form);

f. all required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

g. all results of initial or subsequent performance tests;

h. if the permittee has been granted a waiver from the record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether

a source is meeting the requirements for a waiver of record keeping or reporting requirements;

i. if the permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and Administrator's approval or disapproval;

j. all documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

k. records of any applicability determination, including supporting analyses.

4. [40 CFR 63.1165(b)(1)]
The permittee shall maintain records for 5 years from the date of each record of:

a. scrubber makeup water flow rate data and recirculation water flow rate data;

b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

c. each maintenance inspection and repair, replacement, or other corrective action.

5. [40 CFR 63.1165(b)(3)]
The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator and the Portsmouth Local Air Agency for the life of the affected source or until the source is no longer subject to the provisions of the Subpart. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the plan on record to be made available for inspection by the Administrator and the Portsmouth Local Air Agency for a period of 5 years after each revision to the plan.

6. [40 CFR 63.1165(c)]
General records and 40 CFR Part 63, Subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

7. [40 CFR 63.1160(b)(2)(i)]
The permittee shall monitor and record the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.

8. [40 CFR Part 63.1160(b)(2)(iv) and (b)(2)(v)]
Inspection of each scrubber shall be conducted at intervals of no less than 3 months and shall include the following:

a. cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

b. repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

c. repair or replacement of droplet eliminator elements as needed;

d. repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

e. adjustment of damper settings for consistency with the required air flow.

If the scrubber is not equipped with a viewpoint or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator and the Portsmouth Local Air Agency may be used.

9. [40 CFR 63.1160(b)(2)(vi)]
The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.

10. [40 CFR 63.1160(b)(2)(vii)]
The permittee shall maintain a record of each inspection, including each item identified in section A.III.8, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

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 section A.III.1; and

b. the identification of each malfunction of the control or process equipment required in sections A.III.3.a and/or A.III.3.b and the information required in sections A.III.3.c, A.III.3.d, A.III.3.e, and A.III.4.c.

The permittee shall also identify in these reports any scrubber pressure drop readings that indicate a need for maintenance as required in section A.III.7.

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. [40 CFR 63.1164(a)]
   As required by 40 CFR Part 63.10(d)(2), the permittee of an affected emissions unit shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

4. [40 CFR 63.1164(c)(2)]
   If actions taken by the permittee during a startup, shutdown, or malfunction of an affected emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

5. [40 CFR 63.1164(c)(3)]
   Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

V. Testing Requirements

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

   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 sections A.V.2 through A.V.9.

   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 Part 63.1161 (see sections A.V.2 through A.V.9).

2. The permittee shall conduct, or have conducted, emission testing for the scrubber 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.

[40 CFR 63.1161(a)(1)]
Following approval of the site-specific test plan, the permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass emission rates of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the

emission control device (to determine compliance with the applicable emission concentration standard).

3. [40 CFR 63.1161(a)(2)]
Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

4. [40 CFR 63.1161(a)(3)]
Compliance is achieved if either the average collection efficiency as determined by the HCl mass emission rates at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

5. [40 CFR 63.1161(b)]
During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per section A.V.3, above. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

6. [40 CFR 63.1161(c)(1)]
During the performance test for hydrochloric acid regeneration plants, the permittee shall establish site-specific operating parameter values for the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in 40 CFR Part 63.1162(b)(1). During the emission test, each operating parameter must be monitored and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes for parameters that are monitored continuously. Amount of iron in the spent pickle liquor shall be determined for each run by sampling the liquor every 15 minutes and analyzing a composite of the samples. The permittee shall determine the compliant monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration per 40 CFR 63.1161(a)(2). The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the permittee may reestablish alternative compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

7. The following test methods in 40 CFR Part 60, Appendix A shall be used to determine compliance under 40 CFR Parts 63.1157(a), 63.1157(b), 63.1158(a), and 63.1158(b):

   a. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

   b. Method 2, to determine gas velocity and volumetric flow rate;

   c. Method 3, to determine the molecular weight of the stack gas;

   d. Method 4, to determine the moisture content of the stack gas; and

   e. Method 26A, ``Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources--Isokinetic Method,'' to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

   C(ppmv) = 0.659 C(mg/dscm)

   where:

   C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

8. [40 CFR 63.1161(d)(2)]
   The permittee may use equivalent alternative measurement methods approved by the Administrator and Portsmouth Local Air Agency.

9. [40 CFR 63.1163(d)]
   The permittee shall notify the Administrator and the Portsmouth Local Air Agency in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator and the Portsmouth Local Air Agency to review and approve the site-specific test plan required in 40 CFR Part 63.7(c) and, if requested by the Administrator and/or the Portsmouth Local Air Agency, to have an observer present during the test.

   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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(31,605 gal/min) x (0.0005/100) = 0.158 gal/min or 35.886 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 3000 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 may be determined by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(68,725 gal/min) x (0.0005/100) = 0.344 gal/min or 78.131 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 3000 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(79,160 gal/min) x (0.0005/100) = 0.396 gal/min or 89.941 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 3000 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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.

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 by use of the following formulas:

i. circulation rate (gal/min) x drift factor (%) = Drift Rate

(20,600 gal/min) x (0.0005/100) = 0.103 gal/min or 23.394 liters/hr

ii. concentration of make up water (mg/liter) x number of concentration cycles for the cooling tower = TDS

1000 mg/liter x 3 = 3000 mg/liter

iii. Drift rate x TDS x 1 lb/453,592 mg = emission rate in lb/hr

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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.
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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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

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.

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:

   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 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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:

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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:

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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

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:

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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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. 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 Recordkeeping 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

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.

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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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 Recordkeeping 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 operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the 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
OAC rule 3745-31-05	Limit(s)

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None