



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

03/04/99

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

06-71-01-0104
Chillicothe Correctional Institution
Vincent Branson
15802 State Route 104N
Chillicothe, OH 45601

Dear Vincent Branson:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 12/23/98. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Southeast District Office
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Date: 03/04/99

PRELIMINARY PROPOSED

Effective Date:

Expiration Date:

This document constitutes issuance to:

Chillicothe Correctional Institution
Chillicothe Correctional Institute
15802 State Route 104N
Chillicothe, OH 45206

of a Title V permit for Facility ID: 06-71-01-0104

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

B001 (Coal Boiler #4)
33 MMBtu/hr Coal Fired Boiler

B002 (Coal Boiler #3)
33 MMBtu/hr Coal Fired Boiler

B003 (Coal Boiler #2)
33 MMBtu/hr Coal Fired Boiler

B004 (Coal Boiler #1)
33 MMBtu/hr Coal Fired Boiler

B005 (N.G. Boiler #5)
50 MMBtu/hr Natural Gas Fired Boiler

F001 (OPI Casting Reclaim)
Ohio Penal Industries Highway "Life Light" Casting Reclamation

K001 (OPI Paint Shop)
Ohio Penal Industries Paint Shop (4 Booths installed 1980-1985)

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms

of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related 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 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 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 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 to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month

period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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

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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

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

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.

8. Marketable Permit Programs

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

9. Reasonably Anticipated Operating Scenarios

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

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

11. Federal and State Enforceability

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
 - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

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

14. Operational Flexibility

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

15. Emergencies

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

16. Off Permit Changes

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

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

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

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

17. Compliance Method Requirements

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

B. State Only Enforceable Section

1. Permit to Install Requirement

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. 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.

7. 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.

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

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

- B008 - honor dorm boiler
- B011 - standby diesel generator #1
- T005 - 6,000 gallon diesel underground storage tank (for B011)
- T008 - 6,000 gallon diesel underground storage tank (for B005)
- Z008 - vehicle traffic
- Z009 - coal handling system
- Z010 - ash handling system
- Z110 - 2,000 gallon gasoline AST for facility vehicles
- Z111 - 500 gallon diesel AST for facility vehicles
- Z100 - OPI sand blasting
- Z103 - coal piles
- Z104 - coal transfer
- Z105 - ash transfer
- Z106 - ash piles

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Boiler #4 (B001)
Activity Description: 33 MMBtu/hr Coal Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.18 lb/mmBtu of actual heat input.
	OAC rule 3745-18-77(C)	Sulfur dioxide emissions shall not exceed 5.60 lbs/mmBtu of actual heat input.

2. Additional Terms and Conditions

- The electrostatic precipitator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

II. Operational Restrictions

- None

III. Monitoring and/or Record Keeping Requirements

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

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data, obtained by the continuous opacity monitoring system, whenever the emissions unit is in operation: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and the magnitude of manual calibration adjustments.

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

2. The permittee, in cooperation with State Purchasing in the Department of Administrative Services, shall collect monthly composite samples of the coal received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM Method D2234, Collection of a Gross Sample of Coal. A minimum of 4 composite samples shall be collected each month. Each composite sample shall represent no more than 250 tons of coal delivered. Individual samples must be collected from every truck/railroad car load. The weight of the individual samples, collected from each truck/railroad car load to form a composite sample, shall be in proportion to the quantity of coal received in each shipment during the calendar month.

When the amount of coal delivered is less than 1,000 tons per month, individual samples must still be taken from every truck/railroad car load, but each composite sample may represent less than 250 tons of coal delivered. The minimum of 4 composite samples per month must be maintained regardless of the quantity of coal delivered.

Each composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM Method D3174, Ash in the Analysis of Coal and Coke; ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM Method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency. The permittee may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for ash content, sulfur content, and heat content, and the average monthly sulfur dioxide emissions rate calculations required in section A.IV.2.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

2. Quarterly reports shall be submitted concerning the quality of the composite coal samples and the quantity of the coal received at this emissions unit.

The quarterly reports shall consist of a minimum of 12 composite sample analyses (minimum of 4 per month) and shall include the following emissions unit information for each month during the calendar quarter:

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

Compliance with the sulfur dioxide emissions limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using a weighted average of the analyses of the composite samples.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the Ohio EPA Southeast District Office, and shall cover the data obtained during the previous calendar quarters.

V. Testing Requirements

1. Emission Limitation:

0.18 lb/mmBtu of particulates

Compliance Method:

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.18 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted within 12 months prior to the expiration of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA 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 shall be submitted within 30 days following completion of the test.

V. Testing Requirements (continued)

2. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

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

3. Emission Limitation:

5.6 lb/mmBtu of sulfur dioxide

Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the monitoring and recordkeeping requirements of sections A.III.2 and A.III.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted under USEPA's enforcement policy dated February 11, 1980 (45 FR 9101). In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed to determine sulfur dioxide emissions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	See B.III.1 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- To obtain an exemption from the opacity limitation of OAC rule 3745-17-07(A)(1), pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i), and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained and shall be made available for inspection during normal business hours.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

The continuous opacity monitoring data shall be used to demonstrate compliance with the requirements of OAC rule 3745-17-07(A)(1). The permittee shall be deemed in compliance with OAC rule 3745-17-07(A)(1) if less than 1.5 percent of the nonexempt* 6-minute average opacity values during a calendar quarter exceed 20 percent opacity. (Historical continuous opacity monitoring data for coal-fired boilers equipped with electrostatic precipitators or baghouses indicate that an excess emissions level of 1.5 percent (nonexempt emissions) is representative of good operation and maintenance of the emissions unit and the associated control equipment.) Compliance with the visible emission limitations in OAC rule 3745-17-07(A)(1) may also be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03(B)(1). In the event of a discrepancy between the continuous opacity monitoring data and observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 during the same time period, the Method 9 data will take precedence for that time period.

* exempt emissions are defined in OAC rule 3745-17-07

VI. Miscellaneous Requirements

- 1. A logbook dedicated to the operation and maintenance of the continuous opacity monitoring system must be kept on site and be made available for inspection during regular office hours.**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Boiler #3 (B002)
Activity Description: 33 MMBtu/hr Coal Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.18 lb/mmBtu of actual heat input.
	OAC rule 3745-18-77(C)	Sulfur dioxide emissions shall not exceed 5.60 lbs/mmBtu of actual heat input.

2. Additional Terms and Conditions

- The electrostatic precipitator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data, obtained by the continuous opacity monitoring system, whenever the emissions it is in operation: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and the magnitude of manual calibration adjustments.

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

2. The permittee, in cooperation with State Purchasing in the Department of Administrative Services, shall collect monthly composite samples of the coal received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM Method D2234, Collection of a Gross Sample of Coal. A minimum of 4 composite samples shall be collected each month. Each composite sample shall represent no more than 250 tons of coal delivered. Individual samples must be collected from every truck/railroad car load. The weight of the individual samples, collected from each truck/railroad car load to form a composite sample, shall be in proportion to the quantity of coal received in each shipment during the calendar month.

When the amount of coal delivered is less than 1,000 tons per month, individual samples must still be taken from every truck/railroad car load, but each composite sample may represent less than 250 tons of coal delivered. The minimum of 4 composite samples per month must be maintained regardless of the quantity of coal delivered.

Each composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM Method D3174, Ash in the Analysis of Coal and Coke; ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM Method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency. The permittee may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for ash content, sulfur content, and heat content, and the average monthly sulfur dioxide emissions rate calculations required in section A.IV.2.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

2. Quarterly reports shall be submitted concerning the quality of the composite coal samples and the quantity of the coal received at this emissions unit.

The quarterly reports shall consist of a minimum of 12 composite sample analyses (minimum of 4 per month) and shall include the following emissions unit information for each month during the calendar quarter:

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

Compliance with the sulfur dioxide emissions limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using a weighted average of the analyses of the composite samples.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the Ohio EPA Southeast District Office, and shall cover the data obtained during the previous calendar quarters.

V. Testing Requirements

1. Emission Limitation:

0.18 lb/mmBtu of particulates

Compliance Method:

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.18 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted within 12 months prior to the expiration of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA 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 shall be submitted within 30 days following completion of the test.

V. Testing Requirements (continued)

2. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

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

3. Emission Limitation:

5.6 lb/mmBtu of sulfur dioxide

Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the monitoring and recordkeeping requirements of sections A.III.2 and A.III.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted under USEPA's enforcement policy dated February 11, 1980 (45 FR 9101). In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed to determine sulfur dioxide emissions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	See B.III.1 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- To obtain an exemption from the opacity limitation of OAC rule 3745-17-07(A)(1), pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i), and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained and shall be made available for inspection during normal business hours.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

The continuous opacity monitoring data shall be used to demonstrate compliance with the requirements of OAC rule 3745-17-07(A)(1). The permittee shall be deemed in compliance with OAC rule 3745-17-07(A)(1) if less than 1.5 percent of the nonexempt* 6-minute average opacity values during a calendar quarter exceed 20 percent opacity. (Historical continuous opacity monitoring data for coal-fired boilers equipped with electrostatic precipitators or baghouses indicate that an excess emissions level of 1.5 percent (nonexempt emissions) is representative of good operation and maintenance of the emissions unit and the associated control equipment.) Compliance with the visible emission limitations in OAC rule 3745-17-07(A)(1) may also be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03(B)(1). In the event of a discrepancy between the continuous opacity monitoring data and observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 during the same time period, the Method 9 data will take precedence for that time period.

* exempt emissions are defined in OAC rule 3745-17-07

VI. Miscellaneous Requirements

- 1. A logbook dedicated to the operation and maintenance of the continuous opacity monitoring system must be kept on site and be made available for inspection during regular office hours.**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Boiler #2 (B003)
Activity Description: 33 MMBtu/hr Coal Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.18 lb/mmBtu of actual heat input.
	OAC rule 3745-18-77(C)	Sulfur dioxide emissions shall not exceed 5.60 lbs/mmBtu of actual heat input.

2. Additional Terms and Conditions

- The electrostatic precipitator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data, obtained by the continuous opacity monitoring system, whenever the emissions it is in operation: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and the magnitude of manual calibration adjustments.

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

2. The permittee, in cooperation with State Purchasing in the Department of Administrative Services, shall collect monthly composite samples of the coal received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM Method D2234, Collection of a Gross Sample of Coal. A minimum of 4 composite samples shall be collected each month. Each composite sample shall represent no more than 250 tons of coal delivered. Individual samples must be collected from every truck/railroad car load. The weight of the individual samples, collected from each truck/railroad car load to form a composite sample, shall be in proportion to the quantity of coal received in each shipment during the calendar month.

When the amount of coal delivered is less than 1,000 tons per month, individual samples must still be taken from every truck/railroad car load, but each composite sample may represent less than 250 tons of coal delivered. The minimum of 4 composite samples per month must be maintained regardless of the quantity of coal delivered.

Each composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM Method D3174, Ash in the Analysis of Coal and Coke; ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM Method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency. The permittee may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for ash content, sulfur content, and heat content, and the average monthly sulfur dioxide emissions rate calculations required in section A.IV.2.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

2. Quarterly reports shall be submitted concerning the quality of the composite coal samples and the quantity of the coal received at this emissions unit.

The quarterly reports shall consist of a minimum of 12 composite sample analyses (minimum of 4 per month) and shall include the following emissions unit information for each month during the calendar quarter:

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

Compliance with the sulfur dioxide emissions limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using a weighted average of the analyses of the composite samples.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the Ohio EPA Southeast District Office, and shall cover the data obtained during the previous calendar quarters.

V. Testing Requirements

1. Emission Limitation:

0.18 lb/mmBtu of particulates

Compliance Method:

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.18 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted within 12 months prior to the expiration of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA 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 shall be submitted within 30 days following completion of the test.

V. Testing Requirements (continued)

2. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

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

3. Emission Limitation:

5.6 lb/mmBtu of sulfur dioxide

Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the monitoring and recordkeeping requirements of sections A.III.2 and A.III.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted under USEPA's enforcement policy dated February 11, 1980 (45 FR 9101). In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed to determine sulfur dioxide emissions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	See B.III.1 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- To obtain an exemption from the opacity limitation of OAC rule 3745-17-07(A)(1), pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i), and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained and shall be made available for inspection during normal business hours.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

The continuous opacity monitoring data shall be used to demonstrate compliance with the requirements of OAC rule 3745-17-07(A)(1). The permittee shall be deemed in compliance with OAC rule 3745-17-07(A)(1) if less than 1.5 percent of the nonexempt* 6-minute average opacity values during a calendar quarter exceed 20 percent opacity. (Historical continuous opacity monitoring data for coal-fired boilers equipped with electrostatic precipitators or baghouses indicate that an excess emissions level of 1.5 percent (nonexempt emissions) is representative of good operation and maintenance of the emissions unit and the associated control equipment.) Compliance with the visible emission limitations in OAC rule 3745-17-07(A)(1) may also be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03(B)(1). In the event of a discrepancy between the continuous opacity monitoring data and observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 during the same time period, the Method 9 data will take precedence for that time period.

* exempt emissions are defined in OAC rule 3745-17-07

VI. Miscellaneous Requirements

- 1. A logbook dedicated to the operation and maintenance of the continuous opacity monitoring system must be kept on site and be made available for inspection during regular office hours.**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coal Boiler #1 (B004)
Activity Description: 33 MMBtu/hr Coal Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.18 lb/mmBtu of actual heat input.
	OAC rule 3745-18-77(C)	Sulfur dioxide emissions shall not exceed 5.60 lbs/mmBtu of actual heat input.

2. Additional Terms and Conditions

- The electrostatic precipitator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data, obtained by the continuous opacity monitoring system, whenever the emissions it is in operation: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and the magnitude of manual calibration adjustments.

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

2. The permittee, in cooperation with State Purchasing in the Department of Administrative Services, shall collect monthly composite samples of the coal received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM Method D2234, Collection of a Gross Sample of Coal. A minimum of 4 composite samples shall be collected each month. Each composite sample shall represent no more than 250 tons of coal delivered. Individual samples must be collected from every truck/railroad car load. The weight of the individual samples, collected from each truck/railroad car load to form a composite sample, shall be in proportion to the quantity of coal received in each shipment during the calendar month.

When the amount of coal delivered is less than 1,000 tons per month, individual samples must still be taken from every truck/railroad car load, but each composite sample may represent less than 250 tons of coal delivered. The minimum of 4 composite samples per month must be maintained regardless of the quantity of coal delivered.

Each composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM Method D3174, Ash in the Analysis of Coal and Coke; ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM Method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency. The permittee may utilize the services of any private laboratory to conduct the testing in accordance with ASTM standards.

3. The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for ash content, sulfur content, and heat content, and the average monthly sulfur dioxide emissions rate calculations required in section A.IV.2.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

2. Quarterly reports shall be submitted concerning the quality of the composite coal samples and the quantity of the coal received at this emissions unit.

The quarterly reports shall consist of a minimum of 12 composite sample analyses (minimum of 4 per month) and shall include the following emissions unit information for each month during the calendar quarter:

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

Compliance with the sulfur dioxide emissions limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using a weighted average of the analyses of the composite samples.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the Ohio EPA Southeast District Office, and shall cover the data obtained during the previous calendar quarters.

V. Testing Requirements

1. Emission Limitation:

0.18 lb/mmBtu of particulates

Compliance Method:

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.18 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted within 12 months prior to the expiration of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA 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 shall be submitted within 30 days following completion of the test.

V. Testing Requirements (continued)

2. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

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

3. Emission Limitation:

5.6 lb/mmBtu of sulfur dioxide

Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the monitoring and recordkeeping requirements of sections A.III.2 and A.III.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted under USEPA's enforcement policy dated February 11, 1980 (45 FR 9101). In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed to determine sulfur dioxide emissions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
33 mmBtu/hr coal-fired boiler with electrostatic precipitator	OAC rule 3745-17-07(A)	See B.III.1 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- To obtain an exemption from the opacity limitation of OAC rule 3745-17-07(A)(1), pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i), and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained and shall be made available for inspection during normal business hours.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitation:

20% opacity as a 6-minute average

Compliance Method:

The continuous opacity monitoring data shall be used to demonstrate compliance with the requirements of OAC rule 3745-17-07(A)(1). The permittee shall be deemed in compliance with OAC rule 3745-17-07(A)(1) if less than 1.5 percent of the nonexempt* 6-minute average opacity values during a calendar quarter exceed 20 percent opacity. (Historical continuous opacity monitoring data for coal-fired boilers equipped with electrostatic precipitators or baghouses indicate that an excess emissions level of 1.5 percent (nonexempt emissions) is representative of good operation and maintenance of the emissions unit and the associated control equipment.) Compliance with the visible emission limitations in OAC rule 3745-17-07(A)(1) may also be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03(B)(1). In the event of a discrepancy between the continuous opacity monitoring data and observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 during the same time period, the Method 9 data will take precedence for that time period.

* exempt emissions are defined in OAC rule 3745-17-07

VI. Miscellaneous Requirements

- 1. A logbook dedicated to the operation and maintenance of the continuous opacity monitoring system must be kept on site and be made available for inspection during regular office hours.**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: N.G. Boiler #5 (B005)
Activity Description: 50 MMBtu/hr Natural Gas Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
50 mmBtu/hr natural gas fired boiler with No. 2 fuel oil backup	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBTU actual heat input.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu of actual heat input.*

* See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a This sulfur dioxide emissions limitation is less stringent than the sulfur dioxide emissions limitation established pursuant to the best available technology requirements under OAC rule 3745-31-05 in section B.I.1 of these terms and conditions.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or No. 2 fuel oil as fuel in this emissions unit.
2. The quality of the fuel burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emissions limitation specified in section A.I.1 above.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the quantity of natural gas combusted during each operating day, in cubic feet.

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

2. The permittee shall maintain records of the fuel oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2, described below:

- a. Alternative 1:

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

- b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu).

IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA, Southeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon a volume-weighted average of the calculated sulfur dioxide emission rates from section A.III.2 above. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Southeast District Office) within 45 days after the deviation occurs.

V. Testing Requirements

1. Emission Limitation:

20% opacity as a 6-minute average

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).

V. Testing Requirements (continued)

2. Emission Limitation:

0.020 lb/mmBtu of particulates

Compliance Method:

Compliance shall be demonstrated through emissions calculations using the particulate emission factors of AP-42 Tables 1.4-1 and 1.3-2 and the worst-case hourly fuel consumption:

For natural gas:

$$(6.2 \text{ lbs}/1,000,000 \text{ cu.ft.}) \times (50,000 \text{ cu.ft./hr}) \times (1 \text{ hr}/50 \text{ mmBtu}) = 0.006 \text{ lb/mmBtu}$$

For No. 2 fuel oil:

$$(2.0 \text{ lbs}/1000 \text{ gal}) \times (330 \text{ gal/hr}) \times (1 \text{ hr}/50 \text{ mmBtu}) = 0.013 \text{ lb/mmBtu}$$

3. Emission Limitation:

1.6 lbs/mmBtu of sulfur dioxide

Compliance Method:

When burning natural gas, compliance shall be assumed based on the negligible sulfur content of the fuel combusted.

Except as provided below, when No. 2 fuel oil is burned compliance with the allowable sulfur dioxide emission limitation shall be demonstrated through the record keeping and reporting requirements of sections A.III.2 and A.IV.1, above.

If the sulfur content of each shipment of oil received during a calendar month does not indicate compliance on an "as-received" basis with the allowable emission limitation or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, based on the formula specified in OAC rule 3745-18-04(F), compliance with the allowable sulfur dioxide emission limitation may be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments received (Alternative 1) or burned (Alternative 2).

If required, compliance shall be demonstrated through emissions testing in accordance with methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
50 mmBtu/hr natural gas fired boiler with No. 2 fuel oil backup	OAC rule 3745-31-05 (PTI 06-2166)	Sulfur dioxide emissions shall not exceed 0.28 lb/mmBtu of actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

- Emission Limitation:

0.28 lb/mmBtu of sulfur dioxide

Compliance Method:

When burning natural gas, compliance shall be assumed based on the negligible sulfur content of the fuel combusted.

Except as provided below, when No. 2 fuel oil is burned compliance with the allowable sulfur dioxide emission limitation shall be demonstrated through the record keeping and reporting requirements of sections A.III.2 and A.IV.1, above.

If the sulfur content of each shipment of oil received during a calendar month does not indicate compliance on an "as-received" basis with the allowable emission limitation or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, based on the formula specified in OAC rule 3745-18-04(F), compliance with the allowable sulfur dioxide emission limitation may be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments received (Alternative 1) or burned (Alternative 2).

If required, compliance shall be demonstrated through emissions testing in accordance with methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A.

Facility Name: **Chillicothe Correctional Institute**
Facility ID: **06-71-01-0104**
Emissions Unit: **N.G. Boiler #5 (B005)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: OPI Casting Reclaim (F001)

Activity Description: Ohio Penal Industries Highway "Life Light" Casting Reclamation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ohio Penal Industries Highway "Life Light" Casting Reclamation system, vented to a fabric filter	none	none (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a This fugitive dust emissions unit is not located in an Appendix A area as defined in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ohio Penal Industries Highway "Life Light" Casting Reclamation system, vented to a fabric filter	OAC rule 3745-31-05 (PTI 06-4061)	0.030 gr/dscf of particulates or no visible particulate emissions, whichever is less stringent. See B.I.2.a and B.II.1 below.

2. **Additional Terms and Conditions**

- 2.a The emission limit of 0.030 gr/dscf of particulates was established as "best available technology" for fugitive particulate emissions units, pursuant to OAC rule 3745-31-05. A performance test conducted on October 11, 1994, confirmed that this emissions unit emitted less than 0.030 gr/dscf.

II. Operational Restrictions

1. Particulate emissions shall be vented to a fabric filter with a design efficiency of 99.5%.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, while the emissions unit is in operation, for any visible emissions of fugitive dust escaping from the fabric filter vent and for any leaks of fugitive dust from the enclosure surrounding the casting reclamation system. The presence or absence of any visible emissions from the fabric filter vent or the enclosure shall be noted in an operations log. If any visible emissions are observed from the fabric filter vent or system enclosure, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log. The operations log shall be made available for inspection during normal business hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which (a) identify all days during which any visible particulate emissions were observed from the fabric filter vent and/or the system enclosure, and (b) describes the corrective actions taken to eliminate the visible particulate emissions.

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

V. Testing Requirements

1. Emission Limitation:

0.030 gr/dscf of particulates

Compliance Method:

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.030 gr/dscf in accordance with the following requirements:

The particulate emission testing shall be conducted within 12 months prior to the expiration of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA 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 shall be submitted within 30 days following completion of the test.

2. Emission Limitation:

no visible emissions of particulates

Compliance Method:

If required, compliance shall be demonstrated through visible particulate emissions observations in accordance with Method 22 of 40 CFR Part 60, Appendix A, and the procedures in OAC rule 3745-17-03(B)(4).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: OPI Paint Shop (K001)

Activity Description: Ohio Penal Industries Paint Shop (4 Booths installed 1980-1985)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
truck painting line	OAC rule 3745-21-09(U)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a Pursuant to OAC 3745-21-09(U)(2)(e)(ii), this emissions unit is exempt from the requirements of OAC rule 2745-21-09(U) because maximum daily coating usage is restricted to 10 gallons of coating, as applied, per day.

II. Operational Restrictions

1. The permittee shall employ no more than 10 gallons of coating, as applied, per day in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed; and
 - c. the total volume, in gallons, of all of coatings employed.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the coating line has employed more than 10 gallons of coating, as applied. The notification shall include a copy of the records required in section A.III.1 and A.III.2 of these terms and conditions, and shall be sent to the Ohio EPA Southeast District Office within 45 days after the exceedance occurs.

V. Testing Requirements

1. Formulation data or Method 24 of 40 CFR Part 60, Appendix A, shall be used to determine the VOC content of coatings and cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
truck painting line	OAC rule 3745-31-05 (PTI 06-4209)	Volatile organic compound (VOC) emissions shall not exceed 3.5 tpy on a rolling, 12-month basis.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis for the purpose of determining compliance with the rolling, 12-month VOC emission limit:
 - a. the name and identification of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material employed, in pounds per gallon;
 - c. the volume, in gallons, of each coating and cleanup material employed;
 - d. the total monthly VOC emissions from all coatings and cleanup materials employed, in pounds or tons, i.e., the sum of (B.III.1.b)x(B.III.1.c) for each coating and cleanup material identified in section B.III.1.a; and
 - e. the rolling, 12-month total VOC emissions from all coatings and cleanup materials, in tons, i.e., the sum of the total monthly VOC emissions required in section B.III.1.d for the previous 12 months, inclusive (convert from pounds to tons by dividing "total monthly VOC emissions, in pounds" by "2000 lbs/ton," if necessary).

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Southeast District Office in writing of any monthly record showing that the rolling, 12-month VOC limitation has been exceeded, based on the record keeping requirements of section B.III.1 of these terms and conditions. The notification shall include a copy of such record(s) and shall be sent to the Ohio EPA Southeast District Office within 45 days after the exceedance occurs.

Facility Name: **Chillicothe Correctional Institute**

Facility ID: **06-71-01-0104**

Emissions Unit: **OPI Paint Shop (K001)**

V. Testing Requirements

1. Emission Limitation:

3.5 tpy of VOC on a rolling, 12-month basis

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section B.III.1 of these terms and conditions. Formulation data or Method 24 of 40 CFR Part 60, Appendix A, shall be used to determine the VOC contents of the coatings and cleanup materials.

VI. Miscellaneous Requirements

None

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