



State of Ohio Environmental Protection Agency

Street Address:

1800 WaterMark Drive
Columbus, OH 43215-1099

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

Mailing Address:

P.O. Box 1049
Columbus, OH 43216-1049

03/12/98

CERTIFIED MAIL

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

02-43-11-0008
PAINESVILLE MUNICIPAL ELECTRIC PLANT
Thomas A. Green
325 Richmond Street
Painesville, OH 44077-3263

Dear Thomas A. Green:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 12/11/97. 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: Northeast District Office
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Date: 03/12/98

PRELIMINARY PROPOSED

Effective Date:

Expiration Date:

This document constitutes issuance to:

PAINESVILLE MUNICIPAL ELECTRIC PLANT
325 Richmond Street
Painesville, OH 44077-3263

of a Title V permit for Facility ID: 02-43-11-0008

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

B001 (COAL FIRED BOILER #5)
PULVERIZED COAL FIRED BOILER #5

B003 (COAL FIRED BOILER #3)
STOKER COAL FIRED BOILER #3

B004 (COAL FIRED BOILER #4)
STOKER COAL FIRED BOILER #4

F001 (PLANT ROADWAYS)
PLANT ROADWAYS

F003 (COAL & FLYASH CONVEYING SYSTEMS)
COAL & FLYASH CONVEYING SYSTEMS

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:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(216) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

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 3745-77-07.
- 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 3745-77-02(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.)

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:

F002 - Coal Storage Pile
T001 - Fuel Oil Storage Tank

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions 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 FIRED BOILER #5 (B001)
Activity Description: PULVERIZED COAL FIRED BOILER #5

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>
Boiler No. 5, a B & W model S-10241, pulverized coal-fired, dry bottom boiler with a derated capacity of 250 MMBTU/Hr, and controlled with an electrostatic precipitator.	OAC rule 3745-17-07 (A)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average except for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-10 (C) (1)	Particulate emissions shall not exceed 0.10 lb/MMBTU actual heat input.
	40 CFR Section 52.1881(b)(35)(iv)***	Sulfur dioxide emissions shall not exceed 4.7 lbs/MMBTU actual heat input.

2. Additional Terms and Conditions

- 2.a ***The sulfur dioxide emissions limit listed in 40 CFR Section 52.1881(b)(35)(iv) is 1.2 lbs/MMBTU actual heat input. However, this limit is not and cannot be enforced per Consent Order 76-324 issued on April 4, 1985 by the U.S. District Court, Northern District of Ohio, Eastern Division, based on Case No. 76-324. Said Consent Order mandated the permanent derating of Boiler No. 5 to a maximum hourly heat input capacity of 250 MMBTU/Hr or less, via permanent modifications to the coal feeder system and the FD fans, and set an 'interim' sulfur dioxide limit of 4.7 lbs per MMBTU heat input. The 'interim' limit shall remain in effect until the presently effective Ohio SIP, 40 CFR Section 52.1881(b)(35)(iv) is revised to allow Boiler No. 5 to operate with a limit determined on the basis of attainment and maintenance of the NAAQS for sulfur dioxide.

II. Operational Restrictions

1. The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limitation specified in section A.I above.

III. Monitoring and/or Record Keeping Requirements

1. 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: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect representative grab samples of the coal burned in this emissions unit on a daily basis. Each sample shall be collected from the coal pulverizer mills. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, 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 by the appropriate Ohio EPA District Office.

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 Northeast 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.

2. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

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

V. Testing Requirements

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the 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 Northeast 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 Northeast 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(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. 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

3. Emission Limitation -
4.7 lbs of sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be determined by using the fuel analysis records required pursuant to Section A.III.2 and the applicable equation in OAC rule 3745-18-04(F).

V. Testing Requirements (continued)

4. If required, the permittee shall conduct, or have conducted, sulfur dioxide emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 4.7 lbs/MMBTU actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for sulfur dioxide shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 6 and the procedures in OAC rule 3745-18-04(D).

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

VI. Miscellaneous Requirements

1. **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>
Boiler No. 5, a B & W model S-10241, pulverized coal-fired, dry bottom boiler with a derated heat input capacity of 250.0 MMBTU/Hr, and controlled with an electrostatic precipitator.	OAC rule 3745-18-49 (F)	Sulfur dioxide emissions shall not exceed 5.7 lbs/MMBTU actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- OAC rule 3745-18-49 (F) limits the combined average operating rate of boilers number 3, 4 and 5 (emissions units B001, B003 and B004) to 593.0 MMBTU per hour for any calendar day.

III. Monitoring and/or Record Keeping Requirements

- To obtain an exemption 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.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with 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.

- The permittee shall monitor the hourly heat input to this boiler, in MMBTU per hour, with the existing computerized system.

For each calendar day of boiler operation, the hourly heat input from boilers B001, B003 and B004 shall be summed and divided by the total number of hours of operation from all three boilers (not to exceed 24) to determine the combined average operating rate, in MMBTU/Hr, for the day.

IV. Reporting Requirements

- The permittee shall notify the Ohio EPA Northeast District Office in writing of any record which shows an exceedance of the combined average operating rate limitation on heat input for B001, B003 and B004 for any calendar day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.

V. Testing Requirements

1. Emission Limitation - 5.7 lbs of sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be determined by using the fuel analysis records required pursuant to Section A.III.2 and the applicable equation in OAC rule 3745-18-04(F).

VI. Miscellaneous Requirements

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: COAL FIRED BOILER #3 (B003)
Activity Description: STOKER COAL FIRED BOILER #3

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>
Boiler No. 3, a spreader-stoker coal-fired boiler with a maximum heat input capacity of 218.5 MMBTU/Hr, and controlled with an electrostatic precipitator.	OAC rule 3745-17-07 (A)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average except for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-10 (C) (1)	Particulate emissions shall not exceed 0.10 lb/MMBTU actual heat input.
	OAC rule 3745-18-49 (F)	Sulfur dioxide emissions shall not exceed 5.7 lbs/MMBTU actual heat input.

2. Additional Terms and Conditions

1. **None**

II. Operational Restrictions

1. The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limitation specified in section A.I above.
2. OAC rule 3745-18-49 limits the combined average operating rate of boiler nos. 3, 4 and 5 (emissions units B001, B003 and B004) to 593.0 MMBTU per hour for any calendar day.

III. Monitoring and/or Record Keeping Requirements

1. 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: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect representative grab samples of the coal burned in this emissions unit on a daily basis. Each sample shall be collected from the coal feeder at the boiler. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, 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 by the appropriate Ohio EPA District Office.

3. The permittee shall monitor the hourly steam production rate from this boiler, in lbs per hour, with the existing chart recorder systems and back-calculate the heat input, in MMBTU/Hr, in accordance with the heat balance method or other approved equivalent method.

For each calendar day of boiler operation, the hourly heat input of B001, B003 and B004 shall be summed and divided by the total number of hours of operation from all three boilers (not to exceed 24) to determine the combined average operating rate, in MMBTU/Hr, for the day.

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 Northeast 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.

2. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

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

3. The permittee shall notify the Ohio EPA Northeast District Office in writing of any record which shows an exceedance of the combined average operating rate limitation on heat input for Boilers 3, 4, and 5 for any calendar day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the 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 Northeast 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 Northeast 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(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. 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

3. Emission Limitation -
5.7 lbs of sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be determined by using the fuel analysis records required pursuant to Section A.III.2 and the applicable equation in OAC rule 3745-18-04(F).

V. Testing Requirements (continued)

4. If required, the permittee shall conduct, or have conducted, sulfur dioxide emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 5.7 lbs/MMBTU actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for sulfur dioxide shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 6 and the procedures in OAC rule 3745-18-04(D).

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

VI. Miscellaneous Requirements

1. **None**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Boiler No. 3, a spreader-stoker coal-fired boiler with a maximum heat input capacity of 218.5 MMBTU/Hr, and controlled with an electrostatic precipitator.		

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. **None**

III. Monitoring and/or Record Keeping Requirements

1. To obtain an exemption 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.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with 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

None

VI. Miscellaneous Requirements

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: COAL FIRED BOILER #4 (B004)
Activity Description: STOKER COAL FIRED BOILER #4

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>
Boiler No. 4, a spreader-stoker coal-fired boiler with a maximum heat input capacity of 379.3 MMBTU/Hr, and controlled with an electrostatic precipitator.	OAC rule 3745-17-07 (A)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average except for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-10 (C) (1)	Particulate emissions shall not exceed 0.10 lb/MMBTU actual heat input.
	OAC rule 3745-18-49 (F)	Sulfur dioxide emissions shall not exceed 5.7 lbs/MMBTU actual heat input.

2. Additional Terms and Conditions

- None

II. Operational Restrictions

- The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limitation specified in section A.I above.
- OAC rule 3745-18-49 (F) limits the combined average operating rate of boiler nos. 3, 4 and 5 (emissions units B001, B003 and B004) to 593.0 MMBTU per hour for any calendar day.

III. Monitoring and/or Record Keeping Requirements

1. 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: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect representative grab samples of the coal burned in this emissions unit on a daily basis. Each sample shall be collected from the coal feeder at the boiler. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, 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 by the appropriate Ohio EPA District Office.

3. The permittee shall monitor the hourly steam production rate from this boiler, in lbs per hour, with the existing chart recorder systems and back-calculate the heat input, in MMBTU/Hr, in accordance with the heat balance method or other approved equivalent method.

For each calendar day of operation, the hourly heat input of B001, B003 and B004 shall be summed and divided by the total number of hours of operation (not to exceed 24) to determine the combined average operating rate, in MMBTU/Hr, for the day.

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 Northeast 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.

2. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

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

3. The permittee shall notify the Ohio EPA Northeast District Office in writing of any record which shows an exceedance of the combined average operating rate limitation on heat input for Boilers 3, 4, and 5 for any calendar day. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/MMBTU actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the 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 Northeast 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 Northeast 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(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA Northeast District Office.

2. 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

3. Emission Limitation -
5.7 lbs of sulfur dioxide/MMBTU actual heat input

Applicable Compliance Method -

Compliance shall be determined by using the fuel analysis records required pursuant to Section A.III.2 and the applicable equation in OAC rule 3745-18-04(F).

V. Testing Requirements (continued)

4. If required, the permittee shall conduct, or have conducted, sulfur dioxide emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 5.7 lbs/MMBTU actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for sulfur dioxide shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 6 and the procedures in OAC rule 3745-18-04(D).

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

VI. Miscellaneous Requirements

1. **None**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Boiler No. 4, a spreader-stoker coal-fired boiler with a maximum heat input capacity of 379.3 MMBTU/Hr, and controlled with an electrostatic precipitator.		

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. **None**

III. Monitoring and/or Record Keeping Requirements

1. To obtain an exemption 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.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with 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

None

VI. Miscellaneous Requirements

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: PLANT ROADWAYS (F001)
Activity Description: PLANT ROADWAYS

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>
Plant Roadways and Parking Areas - unpaved surfaces.	OAC rule 3745-17-07(B)	There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.
	OAC rule 3745-17-08(B)	see A.I.2 below

2. Additional Terms and Conditions

- 2.a The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water shall be used as the dust suppressant, and the following equipment shall be used for the periodic applications: the watering wagon and/or the fire hose . The dust suppressant shall be applied to the unpaved surfaces, at a minimum, every day. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
- 2.b Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.
- 2.c A maximum speed limit of 5 miles per hour shall be posted and enforced on the property.
- 2.d Open-bodied vehicles transporting materials likely to become airborne shall be covered at all times.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records which include the following information for the unpaved roadways and parking areas:
 - a. The date dust suppressants were applied to the unpaved surfaces.
 - b. The portions of unpaved surfaces that were treated with dust suppressants.
 - c. The application rate of water and any chemical additives (gallons of each per square yard).
 - d. The name of the equipment operator responsible for the application of the dust suppressants.

IV. Reporting Requirements

1. The permittee shall submit on a semi-annual basis a report which summarizes the information included in the records required by Section A.III.1. These reports shall be submitted by January 31 and July 31 of each year.

V. Testing Requirements

1. Compliance with the visible particulate emission limitation in OAC rule 3745-17-07(B) shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B)(4) or 40 CFR Part 60, Appendix A, method 22.

VI. Miscellaneous Requirements

- 1.. **None**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. **None**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: COAL & FLYASH CONVEYING SYSTEMS (F003)
Activity Description: COAL & FLYASH CONVEYING SYSTEMS

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>
Coal, Fly Ash and Bottom Ash Conveying Equipment.	OAC rule 3745-17-07(B)	Visible particulate emissions from any fugitive dust source shall not exceed twenty percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)	Use of reasonably available control measures (RACM) to prevent fugitive dust from becoming airborne. See A.I.2

2. Additional Terms and Conditions

- 2.a RACM for coal conveying equipment: use of permanent enclosures on all coal elevators and conveyors.

RACM for fly ash and bottom ash conveying equipment: enclosed handling and conveying of all dry fly ash and bottom ash.

RACM for the fly ash and bottom ash silo vents: use of fabric filter dust collectors which achieve an outlet emission rate of 0.030 grain per dscf of exhaust gases or there are no visible particulate emissions from the exhaust stacks, whichever is less stringent.

RACM for fly ash silo and bottom ash silo load-out equipment:

- i. Use of water as a dust suppressant during fly ash and bottom ash load-out into trucks.
- ii. All trucks transporting fly ash and bottom ash shall be of enclosed design or covered at all times to prevent said materials from becoming airborne.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks while the equipment is in operation for any visible particulate emissions from the fabric filter control systems. The presence or absence of any visible emissions from the fabric filter control systems shall be noted in an operations log. If any visible emissions are observed from either system, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

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

2. The permittee shall maintain an operations log at this facility to record the date, time and amount of water used during fly ash and bottom ash load-out into trucks.

IV. Reporting Requirements

1. The permittee shall submit on a semi-annual basis a report which (a) identifies all days during which any visible particulate emissions were observed from the fabric filter control systems and (b) describes the corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Ohio EPA Northeast District Office.
2. The permittee shall submit on a semi-annual basis a report which summarizes the information included in the records required by Section A.III.2. These reports shall be submitted by January 31 and July 31 of each year.

V. Testing Requirements

1. Compliance with the visible particulate emission limitation in OAC rule 3745-17-07(B) shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B)(3). (Method 9)

VI. Miscellaneous Requirements

- 1.. **None**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. None

VI. Miscellaneous Requirements

None

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