



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

05/22/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

14-09-09-0081
Miami University
Micheal David Coons
Environmental Health and Safety Office
6 Hughes Hall
Oxford, OH 45056

Dear Micheal David Coons:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Hamilton County Dept. of Environmental Services.

Very truly yours,

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

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 05/22/02	Effective Date: 05/22/02	Expiration Date: 05/22/07
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This document constitutes issuance of a Title V permit for Facility ID: 14-09-09-0081 to:
 Miami University
 Cole Service Building
 Oxford Campus
 Oxford, OH 45056

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

B010 (Boiler #1) Overstoke Boiler - 95 million BTU/hr w/ #2 Oil Fired Boiler insert	B011 (Boiler #2) Overstoke Boiler - 95 million BTU/hr	B014 (Boiler #4) Gas/#2 Oil Fired Boiler - 132 million BTU/hr
	B012 (Boiler #3) Overstoke Boiler - 95 million BTU/hr	

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 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Hamilton County Dept. of Environmental Services
 250 William Howard Taft Rd
 Cincinnati, OH 45219-2660
 (513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. 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 record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. 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 record keeping 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 (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of 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.6 below if no deviations occurred during the quarter.

- (Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*
- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- (Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- (Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset condition, of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (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 upset conditions.

Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

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

3. Risk Management Plans

If 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.

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

4. Title IV Provisions

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

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

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

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

6. General Requirements

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

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

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

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based

on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

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

- (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

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

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

14. Operational Flexibility

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

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

15. Emergencies

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

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

16. Off-Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; 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 purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (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.)

2. Records Retention Requirements

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

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a

written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

G001 - non-Stage II gasoline dispensing facility
N024 - 65 lbs/hr animal waste incinerator
Z003 - 1000-gallon above-ground diesel storage tank
Z004 - (2) 10000-gallon above-ground No. 2 fuel oil storage tanks
Z005 - coal storage pile (5,000 tons)
Z006 - maintenance spray booth
Z008-Z015 - laboratory fume hoods

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #1 (B010)

Activity Description: Overstoke Boiler - 95 million BTU/hr w/ #2 Oil Fired Boiler insert

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>
95 MMBtu/hr Vibragrate coal, natural gas, and No. 2 oil-fired boiler with electrostatic precipitator (ESP)	OAC rule 3745-31-05(D) (PTI 14-2821) See A.VI.	See A.I.2.a-A.I.2.c and A.II.1-A.II.3.
	OAC rule 3745-31-05(A)(3) (PTI 18-060) See A.VI.	See A.III.5 and A.III.7. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B), 3745-17-10(C), and 40 CFR 52.1881(b)(12)(i).
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)	PE shall not exceed .020 lb/MMBtu of actual heat input when burning only natural gas or No. 2 fuel oil.
	OAC rule 3745-17-10(C)	PE shall not exceed 0.15 lb/MMBtu of actual heat input when burning coal.
	40 CFR 52.1881(b)(12)(i)	SO2 emissions shall not exceed 1.4 lbs/MMBtu actual heat input when burning coal.
	OAC rule 3745-18-15(O)	The emission limitation established in OAC rule 3745-18-15(O) is less stringent than that established in 40 CFR 52.1881(b)(12)(i).

2. Additional Terms and Conditions

2.a When burning only natural gas, the following emission limitations shall not be exceeded:

0.020 lb PE/MMBtu of actual heat input;
0.1 lb NO_x/MMBtu of actual heat input;
0.0006 lb SO₂/MMBtu of actual heat input;
0.035 lb CO/MMBtu of actual heat input; and
0.0028 lb OC/MMBtu of actual heat input.

The lb/MMBtu emission limitations above are based on the emissions units potentials to emit. Therefore, no operational restrictions, monitoring and/or record keeping requirements, and reporting requirements are necessary to demonstrate compliance with these emission limitations.

2.b When burning No. 2 fuel oil, but no coal, the following emission limitations shall not be exceeded:

0.020 lb PE/MMBtu of actual heat input;
0.15 lb NO_x/MMBtu of actual heat input;
0.3 lb SO₂/MMBtu of actual heat input;
0.036 lb CO/MMBtu of actual heat input; and
0.001 lb OC/MMBtu of actual heat input.

The lb/MMBtu emission limitations for PE, NO_x, CO and OC are based on the emissions units potentials to emit. Therefore, no operational restrictions, monitoring and/or record keeping requirements, and reporting requirements are necessary to demonstrate compliance with these emission limitations.

2.c The total combined emissions from the combustion of natural gas, No. 2 fuel oil, and coal shall not exceed the following, based upon a rolling, 12-month summation:

16.52 TPY NO_x;
64.45 TPY SO₂;
1.75 TPY PE;
13.22 TPY CO; and
0.15 TPY OC.

II. Operational Restrictions

1. The maximum natural gas usage rate for this emissions unit shall not exceed 330 MM cubic feet per year, based upon a rolling, 12-month summation.
2. The maximum No. 2 fuel oil usage rate for this emissions unit shall not exceed 1573 thousand gallons per year, based upon a rolling, 12-month summation.
3. The quality of the oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the SO₂ emission limitation of 0.3 lb SO₂/MMBtu of actual heat input, and shall not exceed a maximum sulfur content of 0.3% by weight.

Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

4. The quality of the coal burned in this emissions unit shall have a combination of heat content and sulfur content sufficient to comply with the allowable sulfur dioxide emission rate of 1.4 lbs/MMBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using the analytical results for each monthly composite sample of coal.

5. The permittee shall operate the ESP when burning coal or oil in this emissions unit, except the ESP may not be operated during periods of startup until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis;:
 - a. the amount of natural gas burned, in MM cubic feet;
 - b. the rolling, 12-month summation of the amounts of natural gas burned, in MM cubic feet;
 - c. the amount of No.2 fuel oil burned, in gallons;
 - d. the rolling, 12-month summation of the amounts of No. 2 fuel oil burned, in gallons;
 - e. the amount of coal burned, in pounds; and
 - f. the rolling, 12-month summation of the amounts of coal burned, in pounds.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Hamilton County Department of Environmental Services.

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated 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).)

3. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. A composite sample from all shipments of coal that are received for burning shall be analyzed weekly. A composite sample of the weekly samples shall be analyzed monthly. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample 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 Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the Hamilton County Department of Environmental Services.

For each monthly composite sample, the permittee shall maintain records of the analyses for ash content, sulfur content, and heat content, and the calculated SO₂ emission rate in lb/MMBtu (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F).)

4. When burning coal, the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP. The permittee shall record temperatures as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP reaches 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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 degrees Fahrenheit.

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

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

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

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

6. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 of 40 CFR 60 Appendix B are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
7. The permittee shall operate and maintain existing equipment to continuously monitor and record O₂ from this emissions unit in units of percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to percent O₂ on an instantaneous (one-minute) basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

A statement of certification of the existing continuous O₂ monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3 and/or 40 CFR Part 75. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

8. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ monitoring system designed to ensure continuous valid and representative readings of O₂ emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage limitations specified in sections A.II.1 and A.II.2 of this permit.
2. The permittee shall submit, on a quarterly basis, copies or summaries of the permittee's or oil supplier's analyses for each shipment of oil that is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies or summaries of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment of oil (gallons); and
 - b. the calculated sulfur dioxide emission rate (pounds/mmBtu) for each shipment of oil.

IV. Reporting Requirements (continued)

3. The permittee shall submit, on a quarterly basis, copies of the analyses (wet and/or dry) for each composite sample of coal for this emissions unit. The analyses shall document the ash content (percent), sulfur content (percent), heat content (Btu/pound), and the SO₂ emission rate (lbs/MMBtu of actual heat input) for each composite sample of coal.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the coal shipments received during the previous calendar quarters.

4. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for NO_x, SO₂, PE, CO, and OC from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall notify the Hamilton County Department of Environmental Services, in writing, 30 days prior to firing coal. A performance test for particulate emissions shall be performed and passed prior to the use of coal in this emissions unit. The test shall be performed while burning coal and in accordance with the testing requirements specified in section A.V.12 of this permit.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during startup and shutdown of the emissions unit when the ESP was not in operation and the temperature of the boiler exhaust gases exceeded 250 degrees Fahrenheit.
7. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.
8. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the analytical results for each shipment of oil. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
9. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate for all shipments of coal received during a calendar month. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
10. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting all instances of continuous O₂ 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 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. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

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

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas;
0.020 lb of PE/MMBtu of actual heat input when burning No. 2 fuel oil; and
0.15 lb of PE/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning natural gas-
When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No.2 fuel oil-
When burning No.2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-
When burning coal, compliance may be determined by dividing the AP-42, Fifth Edition, Section 1.1, Table 1.1-4 (revised 7/98) emission factor, in lbs/ton coal, by the heat content for coal (13,000 Btu/lb) and dividing by 2000.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 5 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3. Emission Limitations-
0.1 lb of NO_x/MMBtu of actual heat input when burning natural gas; and
0.15 lb of NO_x/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 100 lbs NO_x/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when No.2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO_x/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A.

4. Emission Limitations -
0.0006 lb of SO₂/MMBtu of actual heat input when burning natural gas;
0.3 lb of SO₂/MMBtu of actual heat input when burning No. 2 fuel oil; and
1.4 lbs of SO₂/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning No. 2 fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each shipment of oil received during each calendar month meets the sulfur dioxide emission limitation.

Applicable Compliance Method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO₂/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each monthly composite sample of coal meets the sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

5. Emission Limitations-
0.035 lb of CO/MMBtu of actual heat input when burning natural gas; and
0.036 lb of CO/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-
When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-
When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

6. Emission Limitations-
0.0028 lb OC/MMBtu of actual heat input when burning natural gas; and
0.001 lb OC/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-
When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs OC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-
When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb OC/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 25, 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

7. Emission Limitations-

The total combined emissions from the combustion of natural gas, No. 2 fuel oil, and coal shall not exceed the following, based upon a rolling, 12-month summation:

16.52 TPY NO_x;
64.45 TPY SO₂;
1.75 TPY PE;
13.22 TPY CO; and
0.15 TPY OC.

Applicable Compliance Method-

Compliance shall be determined as the sum of the individual pollutant emissions from the combustion of natural gas, No. 2 fuel oil, and coal as provided below:

a. For PE, NO_x, SO₂, CO, and OC from natural gas:

(lb/MMBtu allowable from section A.I.2.a) X (1000 Btu/cu. ft natural gas) X (the updated rolling 12-month natural gas usage, in MM cu. ft/yr, from section A.III.1.b)/2000

b. For PE, NO_x, CO, and OC from No.2 fuel oil:

(lb/MMBtu allowable from section A.I.2.b) X (the average of the heat content data for the No. 2 fuel oil for the 12-month period, from section A.III.2, in MMBtu/gallon) X (the updated rolling 12-month No. 2 fuel oil usage, in gallons, from section A.III.1.d)/2000

c. For SO₂ from No. 2 oil:

(the average SO₂ emission rate, for the 12-month period, in lb/MMBtu, from section A.III.2) X (the average of the heat content data for the No. 2 oil for the 12-month period, from section A.III.2, in MMBtu/gallon) X (the updated rolling 12-month No. 2 oil usage, in gallons, from section A.III.1.d)/2000

d. For PE, NO_x, CO, and OC from coal:

(AP-42, Fifth Edition, Section 1.1, Table 1.1-4 (revised 7/98) emission factor, in lbs/ton coal) X (the updated rolling 12-month coal usage from section A.III.1.f, in tons)/2000

e. For SO₂ from coal:

(the average SO₂ emission rate, for the 12-month period, in lb/MMBtu, from section A.III.3) X (the average of the heat content data for the coal for the 12-month period, from section A.III.3, in MMBtu/lb of coal) X (the updated rolling 12-month coal usage, in tons, from section A.III.1.f)/2000

8. Emission Limitation-

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as specified by rule.

Applicable Compliance Method-

Compliance shall be determined by the data collected and recorded in section A.III.7 for the COM and, if required, by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

9. Compliance with the natural gas usage limitation specified in section A.II.1 shall be based on the record keeping in section A.III.1.b.

10. Compliance with the No. 2 fuel oil usage limitation specified in section A.II.2 shall be based on the record keeping in section A.III.1.d.

11. Compliance with the sulfur content limitation specified in section A.II.3 shall be based on the record keeping in section A.III.2.

V. Testing Requirements (continued)

12. If the permittee begins to routinely burn coal in this emissions unit, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 30 days of the commencement of burning coal, and within 6-months prior to the expiration of this permit if the testing required after the commencement of burning coal occurred within the first 30 months after permit issuance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE when burning coal.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60 Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. 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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

1. The installation of B010 was originally covered under PTI 18-060. Miami University took additional fuel usage restrictions and emission limitations for B010 as part of a synthetic minor determination when emissions unit B014 was installed under PTI 14-2821. Both PTI 18-060 and PTI 14-2821 established emission limitations that are independent of each other.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #2 (B011)
Activity Description: Overstoke Boiler - 95 million BTU/hr

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>
95 MMBtu/hr Vibragrate coal and natural gas-fired boiler with electrostatic precipitator (ESP)	OAC rule 3745-31-05(A)(3) (PTI 18-060)	See A.III.3 and A.III.5.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B), 3745-17-10(C), and 40 CFR 52.1881(b)(12)(i). Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)	PE shall not exceed .020 lb/MMBtu of actual heat input when burning only natural gas.
	OAC rule 3745-17-10(C)	PE shall not exceed 0.15 lb/MMBtu of actual heat input when burning coal.
	40 CFR 52.1881(b)(12)(i)	SO2 emissions shall not exceed 1.4 lbs/MMBtu actual heat input when burning coal.
	OAC rule 3745-18-15(O)	The emission limitation established in OAC rule 3745-18-15(O) is less stringent than that established in 40 CFR 52.1881(b)(12)(i).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of the coal burned in this emissions unit shall have a combination of heat content and sulfur content sufficient to comply with the allowable sulfur dioxide emission rate of 1.4 lbs/MMBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using the analytical results for each monthly composite sample of coal.

2. The permittee shall operate the ESP when burning coal in this emissions unit, except the ESP may not be operated during periods of startup until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. A composite sample from all shipments of coal that are received for burning shall be analyzed weekly. A composite sample of the weekly samples shall be analyzed monthly. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample 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 Hamilton County Department of Environmental Services.

For each monthly composite sample, the permittee shall maintain records of the analyses for ash content, sulfur content, and heat content, and the calculated SO₂ emission rate in lb/MMBtu (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F).)

2. When burning coal, the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP. The permittee shall record temperatures as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP reaches 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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 degrees Fahrenheit.

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

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

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

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

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 of 40 CFR 60 Appendix B are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
5. The permittee shall operate and maintain existing equipment to continuously monitor and record O₂ from this emissions unit in units of percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to percent O₂ on an instantaneous (one-minute) basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

A statement of certification of the existing continuous O₂ monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3 and/or 40 CFR Part 75. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

6. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ monitoring system designed to ensure continuous valid and representative readings of O₂ emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the analyses (wet and/or dry) for each composite analysis of coal for this emissions unit. The analyses shall document the ash content (percent), sulfur content (percent), and heat content (Btu/pound) of each composite sample of coal and the SO₂ emission rate (lbs/MMBtu of actual heat input) for each composite sample of coal.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during startup and shutdown of the emissions unit when the ESP was not in operation and the temperature of the boiler exhaust gases exceeded 250 degrees Fahrenheit.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.
4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate for all shipments of coal received during a calendar month. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

IV. Reporting Requirements (continued)

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

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

6. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting all instances of continuous O₂ 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 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. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas; and
0.15 lb of PE/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-

When burning coal, compliance may be determined by dividing the AP-42, Fifth Edition, Section 1.1, Table 1.1-4 (revised 7/98) emission factor, in lbs/ton coal, by the heat content for coal (13,000 Btu/lb) and dividing by 2000.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 5 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3. Emission Limitation -
1.4 lbs of SO₂/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning coal-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each monthly composite sample of coal meets the sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

4. Emission Limitation-
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as specified by rule.

Applicable Compliance Method-

Compliance shall be determined by the data collected and recorded in section A.III.5 for the COM and, if required, by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

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

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

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE when burning coal.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60 Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. 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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #3 (B012)
Activity Description: Overstoke Boiler - 95 million BTU/hr

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>
95 MMBtu/hr Vibragrate coal and natural gas-fired boiler with electrostatic precipitator (ESP)	OAC rule 3745-31-05(A)(3) (PTI 18-060)	See A.III.3 and A.III.5. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B), 3745-17-10(C), and 40 CFR 52.1881(b)(12)(i).
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)	PE shall not exceed .020 lb/MMBtu of actual heat input when burning only natural gas.
	OAC rule 3745-17-10(C)	PE shall not exceed 0.15 lb/MMBtu of actual heat input when burning coal.
	40 CFR 52.1881(b)(12)(i)	SO2 emissions shall not exceed 1.4 lbs/MMBtu actual heat input when burning coal.
	OAC rule 3745-18-15(O)	The emission limitation established in OAC rule 3745-18-15(O) is less stringent than that established in 40 CFR 52.1881(b)(12)(i).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The quality of the coal burned in this emissions unit shall have a combination of heat content and sulfur content sufficient to comply with the allowable sulfur dioxide emission rate of 1.4 lbs/MMBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using the analytical results for each monthly composite sample of coal.

2. The permittee shall operate the ESP when burning coal in this emissions unit, except the ESP may not be operated during periods of startup until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. A composite sample from all shipments of coal that are received for burning shall be analyzed weekly. A composite sample of the weekly samples shall be analyzed monthly. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample 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 Hamilton County Department of Environmental Services.

For each monthly composite sample, the permittee shall maintain records of the analyses for ash content, sulfur content, and heat content, and the calculated SO₂ emission rate in lb/MMBtu (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F).)

2. When burning coal, the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP. The permittee shall record temperatures as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP reaches 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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 degrees Fahrenheit.

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

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

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

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

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 of 40 CFR 60 Appendix B are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
5. The permittee shall operate and maintain existing equipment to continuously monitor and record O₂ from this emissions unit in units of percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to percent O₂ on an instantaneous (one-minute) basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

A statement of certification of the existing continuous O₂ monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3 and/or 40 CFR Part 75. Proof of certification shall be made available to the Hamilton County Department of Environmental Services upon request.

6. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ monitoring system designed to ensure continuous valid and representative readings of O₂ emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the analyses (wet and/or dry) for each composite analysis of coal for this emissions unit. The analyses shall document the ash content (percent), sulfur content (percent), and heat content (Btu/pound) of each composite sample of coal and the SO₂ emission rate (lbs/MMBtu of actual heat input) for each composite sample of coal.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during startup and shutdown of the emissions unit when the ESP was not in operation and the temperature of the boiler exhaust gases exceeded 250 degrees Fahrenheit.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.
4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate for all shipments of coal received during a calendar month. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

IV. Reporting Requirements (continued)

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

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

6. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting all instances of continuous O₂ 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 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. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas; and
0.15 lb of PE/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-

When burning coal, compliance may be determined by dividing the AP-42, Fifth Edition, Section 1.1, Table 1.1-4 (revised 7/98) emission factor, in lbs/ton coal, by the heat content for coal (13,000 Btu/lb) and dividing by 2000.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 5 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3. Emission Limitation -
1.4 lbs of SO₂/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning coal-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each monthly composite sample of coal meets the sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

4. Emission Limitation-
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as specified by rule.

Applicable Compliance Method-

Compliance shall be determined by the data collected and recorded in section A.III.5 for the COM and, if required, by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

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

- a. The emission testing shall be conducted within 6-months after permit issuance and within 6-months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE when burning coal.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 5 of 40 CFR Part 60 Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. 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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #4 (B014)
Activity Description: Gas/#2 Oil Fired Boiler - 132 million BTU/hr

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>
132 MMBtu/hr natural gas and No. 2 oil-fired boiler	OAC rule 3745-31-05(D) (PTI 14-2821)	See A.I.2.a-A.I.2.c and A.II.1.
	OAC rule 3745-17-07(A)	See A.III.3, A.III.4, and A.III.6. The visible emission limitation established pursuant to OAC rule 3745-17-07(A) is less stringent than the visible emission limitation established pursuant to 40 CFR Part 60 Subpart Db.
	OAC rule 3745-17-10(B)	PE shall not exceed .020 lb/MMBtu of actual heat input.
	40 CFR 52.1881(b)(12)(i)	The SO ₂ emission limitation established pursuant to 40 CFR 52.1881(b)(12)(i) is less stringent than the SO ₂ emission limitation established in PTI 14-2821 pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-18-06(D)	The SO ₂ emission limitation established pursuant to OAC rule 3745-18-06(D) is less stringent than the SO ₂ emission limitation established in PTI 14-2821 pursuant to OAC rule 3745-31-05(D).
	40 CFR Part 60 Subpart Db	The emission limitations established pursuant to 40 CFR Part 60 Subpart Db are equivalent to or less stringent than the emission limitations established in PTI 14-2821 pursuant to OAC rule 3745-31-05(D).
		See A.I.2.d.

2. Additional Terms and Conditions

2.a When burning natural gas, the following emission limitations shall not be exceeded:

0.020 lb PE/MMBtu of actual heat input;
0.1 lb NO_x/MMBtu of actual heat input;
0.0006 lb SO₂/MMBtu of actual heat input;
0.035 lb CO/MMBtu of actual heat input; and
0.0028 lb OC/MMBtu of actual heat input.

The lb/MMBtu emission limitations above are based on the emissions units potentials to emit. Therefore, no operational restrictions, monitoring and/or record keeping requirements, and reporting requirements are necessary to demonstrate compliance with these emission limitations.

2.b When burning No. 2 fuel oil the following emission limitations shall not be exceeded:

0.020 lb PE/MMBtu of actual heat input;
0.15 lb NO_x/MMBtu of actual heat input;
0.3 lb SO₂/MMBtu of actual heat input;
0.036 lb CO/MMBtu of actual heat input; and
0.001 lb OC/MMBtu of actual heat input.

The lb/MMBtu emission limitations for PE, NO_x, CO and OC are based on the emissions units potentials to emit. Therefore, no operational restrictions, monitoring and/or record keeping requirements, and reporting requirements are necessary to demonstrate compliance with these emission limitations.

2.c The total combined emissions from the combustion of natural gas and No. 2 fuel oil shall not exceed 40 TPY SO₂ and 40 TPY NO_x, based upon a rolling, 12-month summation.

2.d Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27 percent opacity when burning oil.

The permittee shall perform VE readings per A.III.3 in lieu of the requirement in 40 CFR 60 Subpart Db to continuously monitor and record the opacity of the particulate emissions from this emissions unit.

II. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the SO₂ emission limitation of 0.3 lb SO₂/MMBtu of actual heat input, and shall not exceed a maximum sulfur content of 0.3% by weight.

Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

2. The permittee shall maintain boiler B014 according to procedures and schedules recommended by the boiler manufacturer. The permittee shall keep records of the required necessary maintenance activities, record that maintenance has been performed, including the date of each maintenance activity and documentation of any parts replaced or refurbished.

3. The permittee shall burn only natural gas or number two fuel oil in this emissions unit.

4. The permittee shall operate this emissions unit such that the annual capacity factor when burning fuel oil is less than or equal to 10, where annual capacity factor is defined in 40 CFR 60.41(b) as the ratio between the actual heat input for a steam generating unit from the fuels burned in a calendar year to the potential heat input for the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis:
 - a. the amount of natural gas burned, in MM cubic feet;
 - b. the rolling, 12-month summation of the amounts of natural gas burned, in MM cubic feet;
 - c. the amount of No. 2 fuel oil burned, in gallons; and
 - d. the rolling, 12-month summation of the amounts of No. 2 fuel oil burned, in gallons.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Hamilton County Department of Environmental Services.

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated 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).)

3. The permittee shall provide an observer, certified in accordance with U.S. EPA Method 9, who shall perform 6-minute visible emissions observations at least once during each daylight shift when fuel oil is combusted in this emissions unit. The observer shall perform 6-minute visible emission observations when the boiler reaches operating load after a cold startup with fuel oil.

If the average opacity for any 6-minute set of readings exceeds one (1) percent, then the observer must record an additional two sets of 6-minute visible emission observations for a total of three data sets.

4. The permittee shall operate and maintain existing equipment to continuously monitor and record O₂ from this emissions unit in units of percent O₂.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system. Calibrations shall be according to manufacturer's recommendations. The permittee shall record calibration results of zero/span calibration checks, the magnitude of manual calibration adjustments and the date of the calibration.

5. A logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.
6. The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from this emissions unit in lb(s)/MMBtu. 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 documentation from the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 60, Appendix B, Performance Specification 2. 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 nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
8. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies or summaries of the permittee's or oil supplier's analyses for each shipment of oil that is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies or summaries of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment of oil (gallons); and
 - b. the calculated sulfur dioxide emission rate (pounds/mmBtu) for each shipment of oil.
2. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for NO_x and SO₂ from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.
4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the analytical results for each shipment of oil. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
5. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting all instances of opacity values in excess of the limitations specified in A.I.2.d. These reports shall detail the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

For reporting purposes, excess emissions are defined as any 6-minute period during which the average opacity exceeds 20 percent.

6. 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.

The report shall also include the total time of visible emission observations during the calendar quarter and the total amount of fuel oil burned during a calendar quarter. If the fuel oil annual capacity factor, as defined in 40 CFR 60.41(b) exceeds 10 percent, the permittee shall no longer qualify for the use of the opacity monitoring alternative specified in A.III.3. The permittee shall submit a schedule for installing and certifying a COM within 30 days after exceeding the 10 percent annual capacity factor.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

IV. Reporting Requirements (continued)

7. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the lb(s) NO_x/MMBtu. These reports shall also contain the total NO_x emissions for the calendar quarter recorded in tons.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services documenting any continuous NO_x 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 also be included in the quarterly report.

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

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas; and
0.020 lb of PE/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No.2 fuel oil-

When burning No.2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 5 of 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3. Emission Limitations-
0.1 lb of NO_x/MMBtu of actual heat input when burning natural gas; and
0.15 lb of NO_x/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method-

Compliance may be determined by the data collected and recorded in section A.III.7 for the continuous NO_x monitoring system or by the methods below.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 100 lbs NO_x/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when No.2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO_x/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A.

4. Emission Limitations -
0.0006 lb of SO₂/MMBtu of actual heat input when burning natural gas; and
0.3 lb of SO₂/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning No. 2 fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for all shipments of oil received during each calendar month meets the sulfur dioxide emission limitation.

Applicable Compliance Method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO₂/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

5. Emission Limitations-
0.035 lb of CO/MMBtu of actual heat input when burning natural gas; and
0.036 lb of CO/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

6. Emission Limitations-
0.0028 lb OC/MMBtu of actual heat input when burning natural gas; and
0.001 lb OC/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-
When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs OC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-
When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb OC/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 25, 40 CFR, Part 60, Appendix A.

7. Emission Limitations-
The total combined emissions from the combustion of natural gas and No. 2 fuel oil shall not exceed the following, based upon a rolling, 12-month summation:

40 TPY NO_x; and
40 TPY SO₂.

Applicable Compliance Method-
Compliance shall be determined as the sum of the individual pollutant emissions from the combustion of natural gas and No. 2 fuel oil as provided below:

- a. For NO_x and SO₂ from natural gas:

$(\text{lb/MMBtu allowable from section A.I.2.a}) \times (1000 \text{ Btu/cu. ft natural gas}) \times (\text{the updated rolling 12-month natural gas usage, in MM cu. ft/yr, from section A.III.1.b}) / 2000$

- b. For NO_x from No.2 fuel oil:

$(\text{lb/MMBtu allowable from section A.I.2.b}) \times (\text{the average of the heat content data for the No. 2 fuel oil for the 12-month period, from section A.III.2, in MMBtu/gallon}) \times (\text{the updated rolling 12-month No. 2 fuel oil usage, in gallons, from section A.III.1.d}) / 2000$

- c. For SO₂ from No. 2 oil:

$(\text{the average SO}_2 \text{ emission rate, for the 12-month period, in lb/MMBtu, from section A.III.2}) \times (\text{the average of the heat content data for the No. 2 oil for the 12-month period, from section A.III.2, in MMBtu/gallon}) \times (\text{the updated rolling 12-month No. 2 oil usage, in gallons, from section A.III.1.d}) / 2000$

8. Emission Limitation-
Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27 percent opacity when burning oil.

Applicable Compliance Method-
Compliance shall be determined by the data collected and recorded during visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

9. Compliance with the sulfur content limitation specified in section A.II.1 shall be based on the record keeping in section A.III.2.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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