



Environmental
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

9/30/2011

Pamela Blakley *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.

Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: The Medical Center Company
Facility ID: 1318003059
Permit Type: Renewal
Permit Number: P0094429

Dear Ms. Blakley:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov/dapc> in Microsoft Word and Adobe Acrobat format. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Cleveland Division of Air Quality



PROPOSED

Division of Air Pollution Control Title V Permit for The Medical Center Company

Facility ID:	1318003059
Permit Number:	P0094429
Permit Type:	Renewal
Issued:	9/30/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Title V Permit
for
The Medical Center Company

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Authorization

Facility ID: 1318003059

Facility Description: Steam heat and hot/chilled water provider.

Application Number(s): A0025939, A0025940, A0025941, A0039008, A0042725

Permit Number: P0094429

Permit Description: Title V renewal permit for The Medical Center Company. This Title V renewal permit consists of the following emissions units: 120.4 mmBtu/hr natural gas-fired boiler; 122.9 mmBtu/hr natural gas-fired boiler; 125.0 mmBtu/hr natural gas-fired boiler; five cooling towers; two 140 mmBtu/hr coal-fired boilers; and two 64.5 mmBtu/hr natural gas-fired boilers.

Permit Type: Renewal

Issue Date: 9/30/2011

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number: P0094428

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

The Medical Center Company
2250 Circle Drive
Cleveland, OH 44106-2664

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Cleveland Division of Air Quality. 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, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) 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) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

Effective Date:To be entered upon final issuance

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

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

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Cleveland Division of Air Quality.

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

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

5. 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))

6. 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))

7. 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 Standard Term and Condition A.11 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.

- (1) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when: the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
- (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
- (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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))

9. 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))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. 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))

12. 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))

13. 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:
 - (1) 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.

- (2) 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) 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:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
 - (2) 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.

- (3) 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))

14. 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))

15. 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))

16. 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))

17. 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 emissions 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.
- 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.

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

18. 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.)

19. Insignificant Activities or Emissions Levels

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

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

20. 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))



21. 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))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

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 (i) 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, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

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



27. 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).

28. 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.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) 4.

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

B017 – 400KW emergency generator #1(OAC rule 3745-31-03(A)(4)(b);
B018 - 400KW emergency generator #2 (OAC rule 3745-31-03(A)(4)(b);
B019 - 800KW emergency generator #3 (OAC rule 3745-31-03(A)(4)(b);

B020 – 1,825KW Satellite Plant generator #1 (OAC rule 3745-31-03(A)(4)(b);

B021 – 1,825KW Satellite Plant generator #2 (OAC rule 3745-31-03(A)(4)(b);

L001 – maintenance shop cold cleaner (OAC rule 3745-31-03(A)(1)(aa)); and

T001 - 12,000 gallon UST containing low-sulfur #2 diesel fuel for emergency generators (OAC 3745-31-03(A)(1)(I)(iv)).

Each insignificant emissions unit at this facility must comply with all applicable State and Federal regulations, as well as any emissions limitations and/or control requirements contained within a permit-to-install for that emissions unit. Insignificant emissions units listed above that are not subject to specific permit-to-install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

[Authority for term: OAC rule 3745-77-07(A)(13)]

3. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for particulate emissions for emissions units B003 and B004 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

[Authority for term: 40 CFR Part 64]

4. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

F001 - coal handling system (OAC rule 3745-15-05);

[Authority for term: OAC rule 3745-77-07(A)(13)]

5. The following emissions units have been shut down at this facility:

B001

B002

C. Emissions Unit Terms and Conditions



1. B014, Gas Boiler #6

Operations, Property and/or Equipment Description:

100,000 lbs/hr of steam (Maximum Output) Natural gas-fired boiler rated at 120.4 mmBtu/hr

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-02233 issued November 1, 2005)	10.55 TPY of particulate emissions 0.0006 lb of sulfur dioxide per million Btu actual heat input and 0.32 TPY 0.0375 lb of nitrogen oxides per million Btu actual heat input, as a rolling, 30-day average, and 19.77 TPY Opacity shall not exceed 5% (as a six - minute average), except for one six - minute exemption period in any hour when up to 27% is permissible and during periods of boiler startups, shutdowns and/or reported malfunctions. The requirements established pursuant to this rule also include the requirements of OAC rule 3745-17-10(B)(1).
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per mmBtu of actual heat input.



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 60 Subpart Db	The nitrogen oxide emission limitation specified by this rule is less stringent than the nitrogen oxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-110-03(C)	0.1 lb of NOx/mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September.
f.	40 CFR Part 63, Subpart DDDDD	See b)(2)d. below.

(2) Additional Terms and Conditions

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

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

b. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

c. OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.

d. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The permittee shall only burn natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#13-02233]

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

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#13-02233]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- (2) The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

- a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), these monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #13-02233, issued on 11/1/2005. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC 3745-77-07(A)(3)(a)(ii) and 40 CFR Part 60]

- (3) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter(s)/document(s) of certification shall be made available to the Cleveland DAQ upon request.

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

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (4) The continuous monitoring system required under paragraph (b) of 40 CFR Part 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (5) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of 40 CFR Part 60.48b and required under 40 CFR Part 60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR Part 60.13(b). At least 2 data points must be used to calculate each 1-hour average.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (6) For natural gas usage the analyzer span value for nitrogen oxides is 200 ppm.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (7) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments,

emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (8) Except as provided under paragraph (p) of 40 CFR Part 60.49b, the permittee shall maintain records of the following information for each steam generating unit operating day:
- a. Calendar date.
 - b. The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured.
 - c. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
 - d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR Part 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - e. The 24-hour average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the time period of May through September.
 - f. Identification of the steam generating unit operating days when the calculated 24-hour average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under OAC rule 3745-110-03, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - g. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - h. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
 - i. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - j. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

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- k. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- l. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60 appendix F, Procedure 1.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), PTI#13-02233 and 40 CFR Part 60]

- (9) The permittee shall record and maintain records of the amount of fuel combusted each day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Cleveland DAQ, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-14 and 3745-110, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NO_x and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

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- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total NOx emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60]

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #13-02233, issued on 11/1/2005: this paragraph e)(2) in this Title V permit. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC 3745-77-07(A)(3)(a)(ii)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following methods(s):

- a. Emission Limitation -
10.55 TPY of particulate emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the lb/mmBtu limitation is maintained (the annual limitation was calculated by multiplying the lb of particulate/mmBtu emission limitation by the maximum heat input rate of the emissions unit and 8760 hrs of operation per year, and then dividing by 2000 lbs/ton).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- b. Emission Limitation -
0.0006 lb of sulfur dioxide (SO₂) emissions per mmBtu of heat input

Applicable Compliance Method -

The emission limitation was based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 0.6 lbs SO₂/mm scf emission factor into lb SO₂/mmBtu by dividing by 1,020 Btu/scf.

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- c. Emission Limitation -
0.32 TPY of sulfur dioxide (SO₂) emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the lb/mmBtu limitation is maintained (the annual limitation was calculated by multiplying the lb of SO₂/mmBtu emission limitation by the maximum heat input rate of the emissions unit and 8760 hrs of operation per year, and then dividing by 2000 lbs/ton).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- d. Emission Limitation -
0.0375 lb of NO_x emissions per mmBtu of heat input as a rolling, 30-day average

Applicable Compliance Method -

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

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- e. **Emission Limitation -**
19.77 TPY of NO_x emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the lb/mmBtu limitation is maintained (the annual limitation was calculated by multiplying the lb of NO_x/mmBtu emission limitation by the maximum heat input rate of the emissions unit and 8760 hrs of operation per year, and then dividing by 2000 lbs/ton).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- f. **Emission Limitation -**
Opacity shall not exceed 5%, as a six -minute average, except for one six-minute exemption period in any hour when up to 27% is permissible

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- g. **Emission Limitation -**
0.020 lb of particulate emissions per mmBtu of heat input

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.104 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2(7/98) emission factor for PM/PM₁₀ (7.6

lbsPM/PM10/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (120.4 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lbs/mmBtu emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-02233]

- h. Emission Limitation -
0.1 lb of NOx/mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September

Applicable Compliance Method –

Compliance with the NOx emissions limitations shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60. Determine the twenty-four-hour daily heat input-weighted average NOx emission rate based on the heat input-weighted average of the block hourly arithmetic average emission rates during each twenty-four-hour daily period from twelve a.m. to twelve a.m. the following day using continuous emissions monitor data. The block hourly heat input-weighted average emission rate must be calculated for each one-hour period starting with the period twelve a.m. to one a.m. and continuing through until the last period eleven p.m. to twelve a.m.; or, starting with the period twelve p.m. to one p.m. and continuing through the last period eleven a.m. to twelve p.m.

In accordance with OAC rule 3745-110-05(A), the permittee shall demonstrate compliance with the applicable emission limit by performing emission tests in accordance with USEPA Method 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

[Authority for term: OAC rule 3745-77-07(C)(1) and 3745-110-03(C)]

- g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 13-02233, issued on November 1, 2005: f(1)f.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



2. B016, Gas Boiler #5

Operations, Property and/or Equipment Description:

100,000 lbs/hr of steam (Maximum Output) Natural gas fired Boiler for steam generation. Rated at 122.9 mmBtu/hr

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(PTI# 13-03602 issued July 14, 2005)	1.23 lbs/hr of particulate emissions and 5.38 TPY 0.0375 lb/mmBtu, as a rolling, 30-day average, 4.60 lbs/hr of NOx emissions and 20.1 TPY 9.09 lbs/hr of CO emissions and 39.8 TPY 1.35 lbs/hr of OC emissions and 5.91 TPY See b)(2)a.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 60 Subpart Db	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-110-03(C)	0.1 lb of NOx/mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September.
f.	40 CFR Part 63, Subpart DDDDD	See b)(2)d. below.

(2) Additional Terms and Conditions

- a. The use of natural gas as fuel for burning in this emissions unit is required to satisfy the BAT requirements in OAC 3745-31-05. The emissions unit is also equipped with a Low NOx burner.
- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.
- c. OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.
- d. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#13-03602]

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

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#13-03602]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (2) The permittee shall record and maintain records of the amount of fuel combusted each day.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (3) The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

- a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), these monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #13-03602, issued on 7/14/2005. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-77-07(A)(3)(a)(ii)]

- (4) The continuous monitoring system required under paragraph (b) of 40 CFR Part 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (5) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of 40 CFR Part 60.48b and required under 40 CFR Part 60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR Part 60.13(b). At least 2 data points must be used to calculate each 1-hour average.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (6) For natural gas usage the analyzer span value for nitrogen oxides is 200 ppm.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (7) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-03602]

- (8) Except as provided under paragraph (p) of 40 CFR Part 60.49b, the permittee shall maintain records of the following information for each steam generating unit operating day:
- a. Calendar date.
 - b. The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured.

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- c. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
- d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR Part 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
- e. The 24-hour average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the time period of May through September.
- f. Identification of the steam generating unit operating days when the calculated 24-hour average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under OAC rule 3745-110-03, with the reasons for such excess emissions as well as a description of corrective actions taken.
- g. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- h. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- i. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- j. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- k. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- l. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60 appendix F, Procedure 1.

Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), these monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #13-03602, issued on 7/14/2005. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-77-07(A)(3)(a)(ii)]

- (9) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter(s)/document(s) of certification shall be made available to the Cleveland DAQ upon request.

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Cleveland DAQ, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-14 and 3745-110, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
 - b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NOx and other associated monitors;
 - iii. the location of the continuous NOx monitor;
 - iv. the exceedance report as detailed in (a) above;

- v. the total NOx emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

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

Excess emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate, as determined under 40 CFR Part 60.46b(e), which exceeds the applicable emission limits.

Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), these reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #13-03602, issued on 7/14/2005. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC 3745-77-07(A)(3)(a)(ii) and 40 CFR Part 60]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation -
1.23 lbs/hr of particulate emissions

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input of the emissions unit (122.9 mmBtu/hr) by the manufacturer's emission factor for PM (0.01 lbs particulate/mmBtu).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- b. Emission Limitation -
5.38 TPY of particulate emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- c. Emission Limitation -
0.0375 lb/mmBtu of heat input as a rolling, 30-day average, 4.60 lbs/hr of NOx emissions

Applicable Compliance Method -

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- d. Emission Limitation -
20.1 TPY of NOx emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- e. Emission Limitation -
9.09 lbs/hr of CO emissions

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input of the emissions unit (122.9 mmBtu/hr) by the manufacturer's emission factor for CO (0.074 lb of CO/mmBtu).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- f. Emission Limitation -
39.8 TPY of CO emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- g. Emission Limitation -
1.35 lbs/hr of OC emissions

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly heat input of the emissions unit (122.9 MMBtu/hr) by the AP-42 emission factor for OC (11.0 lbs OC/mmcf) and the heat value for natural gas (1cuft/1000 Btu).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- h. Emission Limitation -
5.91 TPY of OC emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- i. Emission Limitation -
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method(s) -
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-03602]

- j. Emission Limitation -
0.1 lb of NO_x/mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September

Applicable Compliance Method –

Compliance with the NO_x emissions limitations shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60. Determine the twenty-four-hour daily heat input-weighted average NO_x emission rate based on the heat input-weighted average of the block hourly arithmetic average emission rates during each twenty-four-hour daily period from twelve a.m. to twelve a.m. the following day using continuous emissions monitor data. The block hourly heat input-weighted average emission rate must be calculated for each one-hour period starting with the period twelve a.m. to one a.m. and continuing through until the last period eleven p.m. to twelve a.m.; or, starting with the period twelve p.m. to one p.m. and continuing through the last period eleven a.m. to twelve p.m.

In accordance with OAC rule 3745-110-05(A), the permittee shall demonstrate compliance with the applicable emission limit by performing emission tests in accordance with USEPA Method 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C)]

g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 13-03602, issued on July 14, 2005: f)(1)i.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this



operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



3. B022, Gas Boiler #7

Operations, Property and/or Equipment Description:

100,000 lb/hr of Steam Natural gas fired Boiler for steam generation. Rated at 125.0 mmBtu/hrBoiler #7

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#P0108095 issued May 23, 2011)	<p>Nitrogen oxide (NOx) emissions shall not exceed 0.0375 pounds per million Btu of actual heat input (lb/mmBtu), 4.68 lbs/hr as a rolling, 30-day average, and 20.49 tons per year (TPY)</p> <p>Carbon monoxide (CO) emissions shall not exceed 10.29 lbs/hr and 45.07 TPY</p> <p>Particulate emissions (PE) shall not exceed 10.95 TPY.</p> <p>Visible PE shall not exceed 5% opacity (as a six -minute average), except for one six-minute exemption period in any hour when up to 27% opacity is permissible and during periods of boiler startups, shutdowns and/or reported malfunctions.</p> <p>See b)(2)a.</p>



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001	<p>Volatile organic compounds (VOC) emissions shall not exceed 0.67 lb/hr and 2.93 tons/year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.07 lb/hr and 0.31 ton/year.</p> <p>See b)(2)d. below.</p>
c.	OAC rule 3745-31-05(A)(3)(b) as effective 12/01/06	See b)(2)e. below.
d.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per million Btu of heat input.
f.	40 CFR Part 60 Subpart Db	The nitrogen oxide emission limitation specified by this rule is less stringent than the nitrogen oxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-110-03(C)	Nitrogen oxide emissions shall not exceed 0.10 lb per mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September.
h.	40 CFR Part 63, Subpart DDDDD	See b)(2)f. below.

(2) Additional Terms and Conditions

- a. The use of natural gas as fuel for burning in this emissions unit is required to satisfy the BAT requirements in OAC 3745-31-05. The emissions unit is also equipped with a Low Nox burner.
- b. Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and

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

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

- c. OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.
- d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.
- e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled emissions of VOC and SO₂ from this emissions unit since the potential to emit for VOC and SO₂ emissions are less than ten tons per year.

- f. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (2) The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit pursuant to 40CFR Part 60 Subpart Db.

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3) and PTI#P0108095]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (2) The permittee shall record and maintain records of the amount of fuel combusted each day.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (3) The permittee shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (4) The continuous monitoring system required under paragraph (b) of 40 CFR Part 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (5) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of 40 CFR Part 60.48b and required under 40 CFR Part 60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR Part 60.13(h). At least 2 data points must be used to calculate each 1-hour average.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (6) For natural gas usage the analyzer span value for nitrogen oxides is 200 ppm.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (7) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (8) Except as provided under paragraph (p) of 40 CFR Part 60.49b, the permittee shall maintain records of the following information for each steam generating unit operating day:
- a. Calendar date.
 - b. The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured.
 - c. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
 - d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR Part 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - e. The 24-hour average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the time period of May through September.
 - f. Identification of the steam generating unit operating days when the calculated 24-hour average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under OAC rule 3745-11-03, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - g. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - h. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
 - i. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - j. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - k. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

- I. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60 appendix F, Procedure 1.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

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

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

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

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

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

- a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-110, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NO_x and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total NO_x emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;
 - viii. results and date of quarterly cylinder gas audits;

- ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

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

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (2) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
- a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

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

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation -
0.02 lb/mmBtu of particulate emissions

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.122549 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2(7/98) emission factor for particulate emissions (7.6 lbs of PE/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (125.0 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb of particulate/mmBtu emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

b. Emission Limitation -
10.95 TPY of particulate emissions

Applicable Compliance Method -

Compliance with the annual limitation shall be assumed as long as compliance with the lb of particulate per mmBtu limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8,760 operating hrs/year, and then dividing by 2,000 lbs/ton).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

c. Emission Limitation -
0.0375 lb of NO_x/mmBtu and 4.68 lbs/hr of NO_x emissions as a rolling, 30-day average

Applicable Compliance Method -

For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission limit. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period in units of lb/mmBtu. This lb/mmBtu emission rate is multiplied by the hourly heat input of the emissions unit (mmBtu/hr) to arrive at

the lb/hr emission rate. Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8 whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 million Btu/hour) or less and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the nitrogen oxides emission limit through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to Sec. 60.48b(g)(1) or Sec. 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission limits. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

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

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- d. Emission Limitation -
20.49 tons/year of NOx emissions

Applicable Compliance Method -

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- e. Emission Limitation -
10.29 lbs/hr of CO emissions

Applicable Compliance Method -

Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.122549 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors,

Section 1.4, Table 1.4-1(7/98) emission factor for CO emissions (84 lbs of CO/mmcf).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- f. Emission Limitation -
45.07 TPY of CO emissions

Applicable Compliance Method -

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- g. Emission Limitation –
Opacity shall not exceed 5% (as a six -minute average), except for one six-minute exemption period in any hour when up to 27% is permissible and during periods of boiler startups, shutdowns and/or reported malfunctions.

Applicable Compliance Method –

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA method 9 of 40 CFR Part 60, Appendix A.

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- h. Emission Limitation -
0.1 lb of NOx emissions per mmBtu based on a 24-hr daily heat input-weighted average during the period of May through September

Applicable Compliance Method –

Compliance with the NOx emissions limitations shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60. Determine the twenty-four-hour daily heat

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input-weighted average NO_x emission rate based on the heat input-weighted average of the block hourly arithmetic average emission rates during each twenty-four-hour daily period from twelve a.m. to twelve a.m. the following day using continuous emissions monitor data. The block hourly heat input-weighted average emission rate must be calculated for each one-hour period starting with the period twelve a.m. to one a.m. and continuing through until the last period eleven p.m. to twelve a.m.; or, starting with the period twelve p.m. to one p.m. and continuing through the last period eleven a.m. to twelve p.m.

In accordance with OAC rule 3745-110-05(A), the permittee shall demonstrate compliance with the applicable emission limit by performing emission tests in accordance with USEPA Method 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

i. Emission Limitation:

Volatile organic compounds (VOC) emissions shall not exceed 0.67 lb/hr.

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.122549 mmcf/hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lb/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

j. Emission Limitation:

Volatile organic compounds (VOC) emissions shall not exceed 2.93 tons/year.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

k. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 0.07 lb/hr.

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying an emission factor of 0.6 lb of SO₂/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.122549 mmcf/hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lb/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

l. Emission Limitation:

Sulfur dioxide (SO₂) emissions shall not exceed 0.31 ton/year.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour limitation.

Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (2) Within 60 days of achieving normal operation of the emissions unit, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; and ORC section 3704.03(l).

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

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Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; and ORC section 3704.03(I). The continuous emission monitoring system shall be certified at least three months prior to a demonstration of compliance with the applicable emissions limit(s).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (3) 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 180 days of achieving normal operation of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxide.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass nitrogen oxide emission limitation: Methods 7, 7A, 7C, 7D or 7E of 40 CFR, Part 60, Appendix A. [Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.]
 - d. The emission testing shall be conducted while the emission unit is operating at or as close as possible to one hundred per cent load.

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

Personnel from the Cleveland DAQ 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ 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 Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (4) For the compliance demonstrations performed pursuant to paragraph (A) of OAC rule 3745-110-05, the owner or operator shall obtain any additional test data (i.e., flow rates, oxygen concentrations, moisture contents, etc.), continuous diluent monitoring data

(carbon dioxide or oxygen), or source fuel usage or horsepower data, concurrent with the required compliance demonstration in order to convert the emission test results or monitoring data to the units of the applicable limit. Compliance demonstrations shall be performed that are representative of the normal operating modes, including fuel types or fuel blends employed and shall exclude periods of startup, shutdown, malfunction, and low load operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#P0108095]

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # P0108095, issued on May 23, 2011: f)(1)g.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



4. P004, Cooling Tower - CT1S-CT5S

Operations, Property and/or Equipment Description:

22,500 gallons per minute (gpm) forced draft cooling tower, to cool boiler water for facility chiller system (particulate emissions are controlled by a drift eliminator) CT1S-CT5S

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(PTI# 1304299 issued August 31, 2004)	Particulate emissions shall not exceed 2.30 lbs/hr and 10.1 tons per year (TPY). Visible particulate emissions shall not exceed 5% opacity, as a 6-minute average.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

- (1) The permittee shall operate the drift eliminator at all times when the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) and PTI#13-04299]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records that document any time periods when the drift eliminator was not in service when the emissions unit was in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

e) Reporting Requirements

- (1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any record showing that the drift eliminator was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

- (2) The permittee shall submit semiannual written reports that identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
2.30 lbs of particulate emissions/hr

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the AP-42 emission factor for wet cooling towers* (1.7 lbs of PE/1000 gal) by 2% of the circulating water flow (0.02), by the maximum hourly water flow rate (22,500 gal/min x 60 min/hr), and then by (1 - 0.95), which is the control efficiency of the drift eliminator.

*AP-42, Compilation of Air Pollution Emission Factors, Fifth Edition, Supplement D (1-95), Table 13.4-1

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

b. Emission Limitation:
10.1 TPY of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

c. Emission Limitation -
Visible particulate emissions shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method -

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



No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

g) **Miscellaneous Requirements**

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 1304299, issued on August 31, 2004: f)(1)c.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



5. P009, CT6S-CT12S

Operations, Property and/or Equipment Description:

7-Cell crossflow cooling tower rated at 20,000 gal/min. Particulate emissions are controlled by a drift eliminator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)	See b)(2)a. below.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. Permit to Install P0104836, issued June 5, 2009 for this air contaminant source, takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

All particulate emissions will be controlled by a drift eliminator

Particulate emissions shall not exceed 2.04 lbs/hr and 8.94 tons per year (TPY).

Particulate (PM10) emissions shall not exceed 1.14 lbs/hr and 4.99 tons per year (TPY).

Visible particulate emissions shall not exceed 5% opacity, as a 6-minute average.

c) Operational Restrictions

- (1) The permittee shall operate the drift eliminator at all times when the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) and PTI# P0104836]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records that document any time periods when the drift eliminator was not in service when the emissions unit was in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

e) Reporting Requirements

- (1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any record showing that the drift eliminator was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- (2) The permittee shall submit semiannual written reports that identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
2.04 lbs of particulate emissions/hr

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the AP-42 emission factor for wet cooling towers* (1.7 lbs of PE/1000 gal) by 2% of the circulating water flow (0.02), by the maximum hourly water flow rate (20,000 gal/min x 60 min/hr), and then by (1 - 0.95), which is the control efficiency of the drift eliminator.

*AP-42, Compilation of Air Pollution Emission Factors, Fifth Edition, Supplement D (1-95), Table 13.4-1

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- b. Emission Limitation:
8.94 TPY of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- c. Emission Limitation:
1.14 lbs of particulate (PM10) emissions/hr

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the AP-42 emission factor for wet cooling towers* (0.019 lb of PE/1000 gal) by

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the maximum hourly water flow rate (20,000 gal/min x 60 min/hr), and then by (1 - 0.95), which is the control efficiency of the drift eliminator.

*AP-42, Compilation of Air Pollution Emission Factors, Fifth Edition, Supplement D (1-95), Table 13.4-1

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- d. Emission Limitation:
4.99 TPY of particulate (PM10) emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- e. Emission Limitation -
Visible particulate emissions shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method -

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

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0104836]

- g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # P0104836, issued on June 5, 2009: f)(1)e.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



6. Emissions Unit Group -13,020 gpm cooling towers: P001, P002, P003,

Table with 2 columns: EU ID, Operations, Property and/or Equipment Description. Rows for P001, P002, and P003.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 2 columns: Applicable Rules/Requirements, Applicable Emissions Limitations/Control Measures. Rows a, b, and c.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

- (1) The permittee shall operate the drift eliminator at all times when the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) and PTI#13-04299]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records that document any time periods when the drift eliminator was not in service when the emissions unit was in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

e) Reporting Requirements

- (1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any record showing that the drift eliminator was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

- (2) The permittee shall submit semiannual written reports that identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
1.32 lbs of particulate emissions/hr

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the AP-42 emission factor for wet cooling towers* (1.7 lbs of PE/1000 gal) by 2% of the circulating water flow (0.02), by the maximum hourly water flow rate (13,020 gal/min x 60 min/hr), and then by (1 - 0.95), which is the control efficiency of the drift eliminator.

*AP-42, Compilation of Air Pollution Emission Factors, Fifth Edition, Supplement D (1-95), Table 13.4-1

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

b. Emission Limitation:
5.78 TPY of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

c. Emission Limitation -
Visible particulate emissions shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method -

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

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required

pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI#13-04299]

g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 1304299, issued on August 31, 2004: f)(1)c.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

7. Emissions Unit Group -140 mmBtu/hr coal boiler: B003, B004,

EU ID	Operations, Property and/or Equipment Description
B003	140 mmBtu/hr Riley Model VO chain grate coal fired boiler with a maximum steam output of 100,000 lb/hr. Particulate emissions are controlled by a Flex-Clean model 8R264-120/1W8 baghouse.
B004	140 mmBtu/hr Riley Model VO chain grate coal fired boiler with a maximum steam output of 100,000 lb/hr. Particulate emissions are controlled by a Flex-Clean model 8R264-120/1W8 baghouse.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(C)(1)	0.14 lb of particulate emissions per mmBtu of heat input.
c.	OAC rule 3745-18-24(V)(1)	4.6 pounds of sulfur dioxide emissions per million Btu actual heat input.
d.	40 CFR Part 63, Subpart DDDDD	See b)(2)a. below.
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(5), d)(7) – d)(14), e)(4) and e)(5) below. Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule.

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f.	OAC rule 3745-110-03(C)	0.30 lb of NOx emissions per million Btu actual heat input
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(2) Additional Terms and Conditions

- a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.
- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system 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.
- c. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.

c) Operational Restrictions

- (1) The quality of the coal burned in this emissions unit shall have a sulfur content, ash content and heat content sufficient to comply with the allowable emission limitations in b)(1) above.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) This facility shall collect a representative sample of each shipment of coal which is received for burning in this emissions unit. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content, 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

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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, or ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, respectively. Alternative, equivalent methods may be used upon written approval from the Cleveland Division of Air Quality.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) This facility shall record the total quantity of coal received in each shipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA Central Office verifying that the continuous opacity monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

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

[Authority for term: OAC rule 3745-77-07(C)(1), , 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

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

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

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,

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

[Authority for term: OAC rule 3745-77-07(C)(1), , 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

- (5) The CAM plan for this emissions unit has been developed for PE. The CAM performance indicator for the baghouse controlling this emissions unit is operating a fabric filter bag leak detection system. The indicator range is defined as a Continuous Particulate Monitor (CPM) analog output signal that is greater than 50% of scale for a preset limit for 60 seconds. When the performance indicator is operating outside the indicator range, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in e)(5) below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan. In addition to periodic monitoring of the operating parameters and operating a fabric filter bag leak detection system, the permittee also has an inspection/preventative maintenance program for the baghouse and capture system. Based on the results of the inspection/preventative maintenance program, repairs to the baghouse and capture system shall be made as needed. If the current CAM indicator and/or the baghouse and capture system inspection/preventative maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (6) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period

of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 2.0 to 8.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (8) The permittee shall maintain a supply of bags, or any other parts necessary to ensure that the collection/control system will operate properly. Any worn, clogged, or broken equipment should be replaced, or fixed within a reasonable timeframe.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (9) At least once per month, the permittee shall perform a check of the bag cleaning mechanisms for proper function through visual inspection or equivalent means.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (10) The permittee shall calibrate, maintain, and continuously operate a fabric filter bag leak detection system, in accordance with the system manufacturer's instructions, to monitor the baghouse performance. For this purpose, the term "fabric filter bag leak detection system" means a system that is capable of continuously monitoring relative particulate emissions (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate emissions loadings. The fabric filter bag leak detection system shall meet the following:

- a. The fabric filter bag leak detection system must be certified by the manufacturer to be capable of detecting particulate emissions.

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- b. The fabric filter bag leak detection system sensor must provide output of relative particulate emissions loading, and the permittee shall continuously monitor and record the output signal from the sensor.
- c. The fabric filter bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate emissions loading is detected over a preset level, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- d. The initial adjustment of the fabric filter bag leak detection system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by a written report, that the baghouse has been inspected and found to be in good operating condition.
- e. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (11) If the fabric filter bag leak detection system alarms, the permittee shall initiate investigation of the baghouse and/or emissions unit(s) within one (1) hour of the first discovery of the alarming incident for possible corrective action. If corrective action is required, the permittee shall proceed to implement such corrective action, in accordance with a written corrective action plan, as soon as practicable in order to minimize possible exceedances of the emission limitations established in b)(1). The corrective action plan shall include, at a minimum, the following provisions:
 - a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions;
 - b. sealing off defective bags or filter media;
 - c. replacing defective bags or filter media, or otherwise repairing the control device;
 - d. sealing off a defective baghouse compartment;
 - e. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; and
 - f. shutting down the boiler operations.

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The permittee shall maintain records of each bag leak detection system alarm, including the date and time of the alarm, the amount of time taken for corrective action to be initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (12) The permittee shall maintain records of all inspections and maintenance performed on the fabric filter bag leak detection system. Records shall include the date and time of each inspection or maintenance activity; the activities performed; and the results of any drift checks and response tests.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (13) At least once per week, the permittee shall confirm that dust is being removed from the baghouse hoppers through visual inspection or equivalent means of ensuring the proper functioning of removal mechanisms.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (14) The permittee shall conduct monthly QA checks and annual instrument set ups of the fabric filter bag leak detection system consistent with the guidance provided in EPA-454/R-98-015: U.S. EPA Fabric Filter Bag Leak Detection Guidance.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (15) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the fabric filter bag leak detection system monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator range or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to this Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

- (1) Quarterly reports concerning the quality and quantity of coal received for burning in this emissions unit shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ). These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
- a. the total quantity of coal received (tons);
 - b. the average ash content (percent) of the coal received;
 - c. the average sulfur content (percent) of the coal received;

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- d. the average heat content (Btu/lb) of the coal received; and
- e. the calculated, average sulfur dioxide emission rate (pounds sulfur dioxide/MM Btu actual heat input) for the coal received.

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;
 - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.
 - b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:

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- i. the facility name and address;
- ii. the manufacturer and model number of the continuous opacity monitor;
- iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total operating time (hours) of the emissions unit;
- vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
- vii. the date, time, and duration of any/each malfunction** of the continuous opacity monitoring system, emissions unit, and/or control equipment;
- viii. the date, time, and duration of any downtime** of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
- ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

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

* where no exceedance of the opacity limit has occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the quarterly EER report

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 60.7]

- (4) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

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- (5) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify the following:
- a. all periods of time in which the bag leak detection alarm system was triggered; and
 - b. all periods of time (including the date) in which the permittee did not initiate corrective actions, as defined in the CAM plan, within 1 hour of an alarm from the bag leak detection system.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (6) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify the following:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in e)(6)a. (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(6)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in e)(6)a. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1)(a) using the methods and procedures specified in USEPA Reference Method 9.

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No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-03(B)(1)(a)]

- b. Emission Limitation:
0.14 lb of particulate emissions per million Btu actual heat input

Applicable Compliance Method:

Compliance shall be determined in accordance with the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-03(B)(9) and 3745-17-10(C)(1)]

- c. Emission Limitation:
4.6 lbs of SO₂/mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping in d)(1) and d)(2) and through emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-18-04 and 3745-18-06]

- d. Emission Limitation -
0.30 lb of NO_x emissions per mmBtu actual heat input

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in f)(2). The emission testing shall be performed in accordance with the requirements of OAC rule 3745-110-05.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-05]

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

Emission testing shall be conducted to demonstrate compliance with the nitrogen oxide emission limitation. Emission testing for nitrogen oxide emissions shall be conducted within the time frame(s) specified in OAC rule 3745-110-04(B).

The following test method shall be employed to demonstrate compliance with the nitrogen oxide emission limitation: Method 7, 7A, 7C, 7D or 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission testing shall also be conducted to demonstrate compliance with the allowable mass emission rates for particulates, SO₂ and opacity. Emission testing for particulate,

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SO₂ emissions and opacity shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.

The following test method shall be employed to demonstrate compliance with the particulate, SO₂ emission limitations and opacity: Methods 1-5 for particulates, Method 6 or 6C for SO₂ and Method 9 for opacity of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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

Personnel from the Cleveland DAQ 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ 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 Cleveland DAQ.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-05]

g) Miscellaneous Requirements

- (1) None.

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8. Emissions Unit Group -64.5 mmBtu/hr natural gas boiler: B009, B010,

EU ID	Operations, Property and/or Equipment Description
B009	50,000 lbs/hr of steam (Maximum Output) Natural gas-fired boiler rated at 64.5 mmBtu/hr equipped with a Low NOx Burner
B010	50,000 lbs/hr of steam (Maximum Output) Natural gas-fired boiler rated at 64.5 mmBtu/hr equipped with a Low NOx Burner

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(PTI# 13-1726 issued August 24,1987 and PTI# 13-02233 issued November 1, 2005)	0.5 lb of SO2 emissions per mmBtu 0.026 TPY of SO2 emissions 0.86 TPY of particulate emissions 8.6 TPY of NOx emissions 0.0375 lb of NOx emissions per million Btu actual heat input
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions per million Btu actual heat input
d.	OAC rule 3745-110-03(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 63, Subpart DDDDD	See b)(2)b. below.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.
 - b. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.
- c) Operational Restrictions
- (1) The permittee shall only burn natural gas in this emissions unit.
[Authority for term: OAC rule 3745-77-07(A)(1)]
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
[Authority for term: OAC rule 3745-77-07(C)(1)]
 - (2) The permittee shall maintain records of the actual amount (in mmcf/year) of natural gas consumed in this emissions unit.
[Authority for term: OAC rule 3745-77-07(C)(1)]
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
[Authority for term: OAC rule 3745-77-07(C)(1)]
 - (2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify each exceedance of the annual particulate and NOx emission limits. Each report shall be submitted by January 31 and shall cover the previous calendar year.
[Authority for term: OAC rule 3745-77-07(C)(1)]
- f) Testing Requirements
- (1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following methods(s):

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- a. Emission Limitation -
0.5 lb of SO₂ emissions per mmBtu actual heat input
- Applicable Compliance Method -
For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0598 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2(7/98) emission factor for SO₂ (0.6 lb SO₂/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (64.5 mmBtu/hr).
- If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.
- [Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]
- b. Emission Limitation:
0.026 TPY of SO₂ emissions
- Applicable Compliance Method:
Compliance with the TPY emission rate shall be determined by multiplying the actual yearly gas usage amount (in mmcf/yr) of the emissions unit by the emission factor* for SO₂ (0.6 lb/mmcf) and by the factor (1.0 ton/2000 lbs).
- *U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2 (7/98)
- [Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]
- c. Emission Limitation:
0.86 TPY of particulate emissions
- Applicable Compliance Method:
Compliance with the TPY emission rate shall be determined by multiplying the actual yearly gas usage amount (in mmcf/yr) of the emissions unit by the emission factor* for particulates (7.6 lbs/mmcf) and by the factor (1.0 ton/2000 lbs).
- *U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2 (7/98)
- [Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]
- d. Emission Limitation:
8.6 TPY of NO_x emissions

Applicable Compliance Method:

Compliance with the TPY emission rate shall be determined by multiplying the actual yearly gas usage amount (in mmcf/yr) of the emissions unit by the emission rate (in lbsNOx/mmcf) established through the stack testing requirement in f)(2) and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]

- e. Emission Limitation -
0.0375 lb of NOx emissions per mmBtu actual heat input

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in f)(2). The emission testing shall be performed in accordance with the requirements of OAC rule 3745-110-05.

[Authority for term: OAC rules 3745-77-07(C)(1), OAC rule 3745-110-05, 3745-31-05(A)(3) and PTI#13-02233]

- f. Emission Limitation -
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

No visible emission observations are specifically required to demonstrate compliance with these emission limitations but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-17-03 (B)(1)(a), 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]

- g. Emission Limitation -
0.020 lb of particulate per mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0598 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2(7/98) emission factor for PM/PM10 (7.6 lbs PM/PM10/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (64.5 mmBtu/hr).

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If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and PTI#13-01726]

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within the time frame(s) specified in OAC rule 3745-110-04(B).

The emission testing shall be conducted to demonstrate compliance with the nitrogen oxide emission limitation.

The following test method shall be employed to demonstrate compliance with the nitrogen oxide emission limitation: Method 7, 7A, 7C, 7D or 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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

Personnel from the Cleveland DAQ 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ 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 Cleveland DAQ.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-05]

g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 13-1726 issued on August 24, 1987 and PTI# 13-02233 issued on November 1, 2005: f)(1)f.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]