

8/2/2012

Certified Mail

BRUCE RICHARDSON
Cleveland Clinic Foundation
9500 EUCLID AVE
Rm. CC46
Cleveland, OH 44195-0001

Facility ID: 1318004311
Permit Number: P0106962
County: Cuyahoga

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Initial

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Cleveland Division of Air Quality. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,



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

Cc: U.S. EPA Region 5 Via E-Mail Notification
Cleveland Division of Air Quality



FINAL

**Division of Air Pollution Control
Title V Permit
for
Cleveland Clinic Foundation**

Facility ID:	1318004311
Permit Number:	P0106962
Permit Type:	Initial
Issued:	8/2/2012
Effective:	10/1/2012
Expiration:	10/1/2017



Division of Air Pollution Control
Title V Permit
for
Cleveland Clinic Foundation

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Authorization

Facility ID: 1318004311
Facility Description: Hospital
Application Number(s): A0040025, A0042441, A0042598
Permit Number: P0106962
Permit Description: Title V initial permit for The Cleveland Clinic Foundation. This is a hospital. This initial permit is for two (2) natural gas-fired boilers and nine (9) natural gas/No.2 fuel oil-fired backup boilers.
Permit Type: Initial
Issue Date: 8/2/2012
Effective Date: 10/1/2012
Expiration Date: 10/1/2017
Superseded Permit Number:

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

Cleveland Clinic Foundation
9500 Euclid Ave, Room CC46
Cleveland, OH 44195

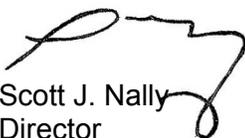
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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 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.

- f) 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:
- (1) 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 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 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) None.

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

EU ID	Operations, Property and/or Equipment Description
B028	20 kW emergency generator natural gas engine D2 (OAC rule 3745-31-03(A)(4)(b))
B029	750 kW No.2 oil fired emergency generator KK1 (OAC rule 3745-31-03(A)(4)(b))
B030	2000 kW No.2 oil fired emergency generator MM1 (OAC rule 3745-31-03(A)(4)(b))
B031	2000 kW No.2 oil fired emergency generator MM2 (OAC rule 3745-31-03(A)(4)(b))
B032	150 kW No.2 oil fired emergency generator YY1 (OAC rule 3745-31-03(A)(4)(b))
B033	39 kW emergency generator natural gas OS1 (OAC rule 3745-31-03(A)(4)(b))
B034	100 kW emergency generator No.2 oil HS1 (OAC rule 3745-31-03(A)(4)(b))
B035	300 kW diesel emergency generator GCIC Generator (OAC rule 3745-31-03(A)(4)(b))
B036	155 kW diesel emergency generator Playhouse Generator (OAC rule 3745-31-03(A)(4)(b))
B501	3.4 mmBtu/hr No. 2 oil fired emergency generator Cummins Model# KTA3067GS (OAC rule 3745-31-03(A)(4)(b))
B502	3.4 mmBtu/hr diesel fired emergency generator Cummins Model# KTA3067GS (OAC rule 3745-31-03(A)(4)(b))
B503	0.29 mmBtu/hr natural gas emergency generator ONAN Model 85KR4XR8/7553K (OAC rule 3745-31-03(A)(4)(b))
B504	4.3 mmBtu/hr diesel emergency generator Caterpillar Model 3512 (OAC rule 3745-31-03(A)(4)(b))
B505	5.1 mmBtu/hr diesel emergency generator ONAN 1500 DFMB (OAC rule 3745-31-03(A)(4)(b))
B506	0.5 mmBtu/hr diesel emergency generator Caterpillar Model D150P1 (OAC rule 3745-31-03(A)(4)(b))
B507	2.7 mmBtu/hr diesel emergency generator Cummins Model KTA2300GS1 (OAC rule 3745-31-03(A)(4)(b))
B508	2.7 mmBtu/hr diesel emergency generator Cummins Model KTA2300GS1 (OAC rule 3745-31-03(A)(4)(b))
B509	2 mmBtu/hr diesel emergency generator Caterpillar Model D348 (OAC rule 3745-31-03(A)(4)(b))
B510	2 mmBtu/hr diesel emergency generator Caterpillar Model D348 (OAC rule 3745-31-03(A)(4)(b))
B511	2 mmBtu/hr diesel emergency generator Caterpillar Model D348 (OAC rule 3745-31-03(A)(4)(b))
B512	0.85 mmBtu/hr diesel emergency generator Caterpillar Model 3306 (OAC rule 3745-31-03(A)(4)(b))
B513	2.7 mmBtu/hr diesel emergency generator Caterpillar Model 3412 (OAC rule 3745-31-03(A)(4)(b))
B514	2.7 mmBtu/hr diesel emergency generator Caterpillar Model SR4B (OAC rule 3745-31-03(A)(4)(b))
B515	diesel emergency generator GM Model 7163-7305 16VA12234 (OAC rule 3745-31-

EU ID	Operations, Property and/or Equipment Description
	03(A)(4)(b))
B516	1.4 mmBtu/hr diesel emergency generator GM 7123-3100 (OAC rule 3745-31-03(A)(4)(b))
B517	2.0 mmBtu/hr diesel emergency generator Caterpillar 3412 (OAC rule 3745-31-03(A)(4)(b))
B518	2.7 mmBtu/hr diesel emergency generator Caterpillar 3412 (OAC rule 3745-31-03(A)(4)(b))
B519	1.7 mmBtu/hr diesel emergency generator Caterpillar 3412 (OAC rule 3745-31-03(A)(4)(b))
B520	3.4 mmBtu/hr diesel emergency generator Caterpillar SR4B; (OAC rule 3745-31-03(A)(4)(b))
B521	3.5 mmBtu/hr diesel emergency generator Kohler 1000REOZM (OAC rule 3745-31-03(A)(4)(b))
B522	0.34 mmBtu/hr diesel emergency generator GM 6043-CSP292 (OAC rule 3745-31-03(A)(4)(b))
B523	500 kW large diesel engine CAT 3412 (OAC rule 3745-31-03(A)(4)(b))
B524	7.7 mmBtu/hr diesel emergency generator Caterpillar AA27833000 (OAC rule 3745-31-03(A)(4)(b))
B525	7.7 mmBtu/hr diesel emergency generator Caterpillar AA27833000 (OAC rule 3745-31-03(A)(4)(b))
B526	300 kW diesel small generator - GM Detroit 7163-7200 16VA104 (OAC rule 3745-31-03(A)(4)(b))
B527	300 kW diesel emergency generator GM Detroit 7163-7200 16VA104 (OAC rule 3745-31-03(A)(4)(b))
B528	1.02 mmBtu/hr diesel emergency generator Caterpillar D343 (OAC rule 3745-31-03(A)(4)(b))
B529	4.3 mmBtu/hr diesel emergency generator Caterpillar 3512 (OAC rule 3745-31-03(A)(4)(b))
B530	0.51 mmBtu/hr diesel emergency generator Caterpillar 3208 (OAC rule 3745-31-03(A)(4)(b))
B533	2.1 mmBtu/hr diesel emergency generator GM-Detroit, 8163-7305 S/N 16VF002346 (OAC rule 3745-31-03(A)(4)(b))
B534	7.7 mmBtu/hr diesel emergency electrical generator Caterpillar 3516 (OAC rule 3745-31-03(A)(4)(b))
B535	2682 horsepower or 2000 kW diesel electrical generator Caterpillar model 3516 (OAC rule 3745-31-03(A)(4)(b))
B536	2682 horsepower or 2000 kW diesel electrical generator Caterpillar model 3516 (OAC rule 3745-31-03(A)(4)(b))
B537	2682 horsepower or 2000 kW diesel electrical generator Caterpillar model 3516 (OAC rule 3745-31-03(A)(4)(b))
B538	2682 horsepower or 2000 kW diesel electrical generator Caterpillar model 3516 (OAC rule 3745-31-03(A)(4)(b))
B539	1,500 kW diesel fuel emergency generator CAT Model 3512C LL building (OAC Rule 3745-31-03(a)(4)(b))
B540	60 kW diesel generator OS Building Cat Model D60-6 S/N C44EGLD00108 (OAC rule 3745-31-03(A)(4)(b))

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. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61, Subpart M.

[Authority for term: 40 CFR Part 61, Subpart M]

4. All ethylene oxide (EO) sterilization units at this facility shall comply with the applicable requirements specified in 40 CFR Part 63 Subpart WWWW.

[Authority for term: 40 CFR Part 63, Subpart WWWW]

C. Emissions Unit Terms and Conditions

1. B005, RR Building Boiler 5

Operations, Property and/or Equipment Description:

171.3 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler

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 operation(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 are identified below. 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# P0108728 issued September 26, 2011)	<p>When burning natural gas: Carbon monoxide (CO) emissions shall not exceed 14.11 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.92 lb/hr. Sulfur dioxide (SO₂) emissions shall not exceed 0.10 lb/hr. Particulate (PM/PM₁₀) emissions shall not exceed 1.28 lbs/hr.</p> <p>See b)(2)a. below.</p> <p>When burning No. 2 fuel oil: Carbon monoxide (CO) emissions shall not exceed 6.03 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.24 lb/hr. Particulate (PM/PM₁₀) emissions shall not exceed 3.98 lbs/hr. Sulfur dioxide (SO₂) emissions shall not exceed 6.85 lbs/hr.</p> <p>See b)(2)b. below.</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rules 3745-17-07(A) and 3745-110-03(C).</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	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).
d.	OAC rule 3745-18-06(D)	The sulfur dioxide emission limitation specified by this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-31-05(D) Synthetic Minor to avoid PSD	<p>The combined annual emissions resulting from the operation of emission units B005 and B006 shall not exceed the following limits:</p> <p>When burning natural gas: 39.93 tons of NO_x emissions as a 12-month rolling summation 32.89 tons of CO emissions as a 12-month rolling summation</p> <p>When burning No. 2 fuel oil: 0.33 ton of SO₂ emissions as a 12-month rolling summation 0.99 ton of NO_x emissions as a 12-month rolling summation</p>
f.	OAC rule 3745-110-03(C)	<p>When burning natural gas: Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb per mmBtu actual heat input.</p> <p>When burning No. 2 fuel oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb per mmBtu actual heat input.</p>
g.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

a. When firing natural gas,

The annual emissions resulting from the operation of emissions unit B005 shall not exceed the following limits:

NO_x 39.93 tons/year

CO 32.89 tons/year

VOC 2.15 tons/year

SO₂ 0.23 ton/year

PM/PM₁₀ 2.98 tons/year

b. When firing No.2 fuel oil,

The annual emissions resulting from the operation of emissions unit B005 shall not exceed the following limits:

NO_x 0.49 ton/year

CO 0.14 ton/year

VOC 0.01 ton/year

SO₂ 0.16 ton/year

PM/PM₁₀ 0.10 ton/year

c. This emissions unit was installed in June 1976. The fuel feed equipment serving it was upgraded in December 1984.

d. This emissions unit is not currently subject to the requirements specified in 40 CFR Part 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) or 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.)

e. This emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Such periods include the intentional shut off of the gas supply as a safety measure during building and/or street renovations or construction. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (1) The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

- a. a sulfur content which is sufficient to comply with the allowable maximum sulfur in fuel limitation of 0.04% by weight.

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (2) The combined maximum annual natural gas usage for emissions units B005 and B006 shall not exceed 783 mmcf, based upon a rolling, 12-month summation of the natural gas usage rate figures.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (3) The maximum annual No. 2 fuel oil usage for source B005 shall not exceed 57,888 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil usage figures.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (2) The permittee shall maintain monthly records of the following information for emission unit B005 :

- a. the No. 2 fuel oil usage rate for each month in gallons;
- b. the monthly operating hours while burning No. 2 fuel oil; and
- c. the rolling, 12-month summation of the No. 2 fuel oil usage rates.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (3) The permittee shall maintain monthly records of the following information for emission units B005 and B006 combined:
- a. the amount of natural gas burned for each month in mmcf; and
 - b. the rolling, 12-month summation of natural gas burned in these emissions units.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (4) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Cleveland Division of Air Quality (Cleveland DAQ).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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 and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month No.2 fuel oil usage limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (3) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month natural gas usage limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (4) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the sulfur content percent by weight limitation for No. 2 fuel oil combusted in this emissions unit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (5) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the annual operating hours for this emissions unit while burning No. 2 fuel oil. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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 method(s):

a. Emission Limitation:

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

Applicable Compliance Method:

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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

b. Emission Limitation –

NOx emissions shall not exceed 0.10 lb/mmBtu and 39.93 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/mmBtu emission limitation was demonstrated through performance testing conducted in December 2010. The average emission rate for NOx emissions was 0.0375 lb/mmBtu. See f)(2) of this permit for additional NOx testing requirements.

The tons/year emission rate shall be determined by multiplying the lb/mmBtu NOx emission rate established through performance testing by the heating value for natural gas (1,020 Btu/cu.ft), the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C) and 3745-31-05(A)(3) PTI# P0108728]

c. Emission Limitation –

CO emissions shall not exceed 14.11 lbs/hr and 32.89 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (167,941 cu.ft/hr) and 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 (84 lbs of CO/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for CO (84 lbs of CO/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

d. Emission Limitation -

VOC emissions shall not exceed 0.92 lb/hr and 2.15 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (167,941 cu.ft/hr) and 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 VOC (5.5 lbs of VOC/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 or 25A of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for VOC (5.5 lbs of VOC/million cubic feet) by the annual natural gas usage (in mmcu.ft) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

e. Emission Limitation –

SO₂ emissions shall not exceed 0.1 lb/hr and 0.23 ton/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (167,941 cu.ft/hr) and 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 of SO₂/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the AP-42 emission factor for SO₂ (0.6 lb of SO₂/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

f. Emission Limitation -

PM/PM₁₀ emissions shall not exceed 1.28 lbs/hr of and 2.98 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (167,941 cu.ft/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 of PM/PM₁₀/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 5 of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for PM/PM₁₀ (7.6 lbs PM/PM₁₀/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C) and 3745-31-05(A)(3) PTI# P0108728]

g. Emission Limitation -

NO_x emissions shall not exceed 0.12 lb/mmBtu and 0.49 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/mmBtu emission limitation was demonstrated through performance testing conducted in December 2010. The average emission rate for NO_x emissions was 0.0951 lb/mmBtu.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

If the permittee uses the fuel oil for more than a backup/emergency basis (as noted in b)(2)e.), then the permittee may be required to test and comply with the allowable limit of 0.12 lb NO_x/mmBtu for fuel oil.

The tons/year emission rate will be determined by multiplying the lb/mmBtu NO_x emission rate established through performance testing by the heating factor for No. 2 fuel oil (0.14 mmBtu/gallon), the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

h. Emission Limitation –

CO emissions shall not exceed 6.03 lbs/hr and 0.14 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,206 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) for CO (5 lbs/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be determined by multiplying the above AP-42 emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

i. Emission Limitation -

PM/PM₁₀ emissions shall not exceed 3.98 lbs/hr and 0.10 ton/year when burning No. 2 fuel oil

Applicable Compliance Method –

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,206 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) and Table 1.3-2 (5/10) for PM/PM₁₀ (3.3 lbs/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 5 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be determined by multiplying the above AP-42 emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

j. Emission Limitation -

SO₂ emissions shall not exceed 6.85 lbs/hr and 0.16 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,206 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) emission factor for SO₂ (142*S lbs/1,000gal where S = %weight of sulfur in the No. 2 fuel oil).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the above lb/1,000 gal emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

k. Emission Limitation -

VOC emissions shall not exceed 0.24 lb/hr and 0.01 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,206 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-3(5/10) emission factor for VOC (0.2 lb/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 or 25A of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the above lb/1,000 gal emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

l. Emission Limitation-

When burning natural gas in emissions units B005 and B006 (combined total) 39.93 tons of NO_x emissions as a 12-month rolling summation

Applicable Compliance Method -

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(3) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

m. Emission Limitation-

When burning natural gas in emissions units B005 and B006 (combined total) 32.89 tons of CO emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(3) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

n. Emission Limitation -

When burning No. 2 fuel oil in emissions units B005 and B006 (combined total)
0.33 ton of SO₂ emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(2) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

o. Emission Limitation -

When burning No. 2 fuel oil in emissions units B005 and B006 (combined total)
0.99 ton of NO_x emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(2) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

(2) 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 12 months prior to permit expiration to demonstrate compliance with the allowable mass emission rate for NO_x of 0.10 lb per mmBtu actual heat input while burning natural gas.

- b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 7, 7A, 7C, 7D or 7E of 40 CFR Part 60, Appendix A for NO_x. [Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.]
- c. The emission testing shall be conducted while the emissions unit is operating at or near its maximum steam load and employing natural gas as fuel.

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) and OAC rule 3745-110-05]

g) **Miscellaneous Requirements**

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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

2. B006, RR Building Boiler 4

Operations, Property and/or Equipment Description:

173.2 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler

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 operation(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 are identified below. 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# P0108728 issued September 26, 2011)	<p>When burning natural gas: Carbon monoxide (CO) emissions shall not exceed 14.26 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.93 lb/hr. Sulfur dioxide (SO₂) emissions shall not exceed 0.10 lb/hr. Particulate (PM/PM₁₀) emissions shall not exceed 1.29 lbs/hr.</p> <p>See b)(2)a. below.</p> <p>When burning No. 2 fuel oil: Carbon monoxide (CO) emissions shall not exceed 6.10 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.24 lb/hr. Particulate (PM/PM₁₀) emissions shall not exceed 4.03 lbs/hr. Sulfur dioxide (SO₂) emissions shall not exceed 6.93 lbs/hr.</p> <p>See b)(2)b. below.</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rules 3745-17-07(A) and 3745-110-03(C).</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	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).
d.	OAC rule 3745-18-06(D)	The sulfur dioxide emission limitation specified by this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-31-05(D) Synthetic Minor to avoid PSD	<p>The combined annual emissions resulting from the operation of emission units B005 and B006 shall not exceed the following limits:</p> <p>When burning natural gas: 39.93 tons of NO_x emissions as a 12-month rolling summation 32.89 tons of CO emissions as a 12-month rolling summation</p> <p>When burning No. 2 fuel oil: 0.33 ton of SO₂ emissions as a 12-month rolling summation 0.99 ton of NO_x emissions as a 12-month rolling summation</p>
f.	OAC rule 3745-110-03(C)	<p>When burning natural gas: Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb per mmBtu actual heat input.</p> <p>When burning No. 2 fuel oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb per mmBtu actual heat input.</p>
g.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

a. When firing natural gas,

The annual emissions resulting from the operation of emissions unit B006 shall not exceed the following limits:

NO_x 39.93 tons/year

CO 32.89 tons/year

VOC 2.15 tons/year

SO₂ 0.23 ton/year

PM/PM₁₀ 2.98 tons/year

b. When firing No.2 fuel oil,

The annual emissions resulting from the operation of emissions unit B006 shall not exceed the following limits:

NO_x 0.50 ton/year

CO 0.15 ton/year

VOC 0.01 ton/year

SO₂ 0.17 ton/year

PM/PM₁₀ 0.10 ton/year

c. This emissions unit was installed in June 1971. The fuel feed equipment serving it was upgraded in January 1985.

d. This emissions unit is not currently subject to the requirements specified in 40 CFR Part 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) or 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.)

e. This emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Such periods include the intentional shut off of the gas supply as a safety measure during building and/or street renovations or construction. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.
[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]
- (2) The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:
 - a. a sulfur content which is sufficient to comply with the maximum allowable sulfur in fuel limitation of 0.04% by weight.Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.
[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]
- (3) The combined maximum annual natural gas usage for emissions units B005 and B006 shall not exceed 783 mmcf, based upon a rolling, 12-month summation of the natural gas usage rate figures.
[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]
- (4) The maximum annual No. 2 fuel oil usage for source B006 shall not exceed 58,560 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil usage figures.
[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108728]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]
- (2) The permittee shall maintain monthly records of the following information for emissions unit B006:
 - a. the No. 2 fuel oil usage rate for each month in gallons;
 - b. the monthly operating hours while burning No. 2 fuel oil; and
 - c. the rolling, 12-month summation of the No. 2 fuel oil usage rates.[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (3) The permittee shall maintain monthly records of the following information for emission units B005 and B006 combined:
- a. the amount of natural gas burned for each month in mmcf; and
 - b. the rolling, 12-month summation of natural gas burned in these emissions units.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (4) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Cleveland Division of Air Quality (Cleveland DAQ).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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 and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month No. 2 fuel oil usage limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (3) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month natural gas usage limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (4) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the sulfur content limitation for oil combusted in this emissions unit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (5) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the annual operating hours for this emissions unit while burning No. 2 fuel oil. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

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 method(s):

a. Emission Limitation:

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

Applicable Compliance Method:

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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

b. Emission Limitation –

NO_x emissions shall not exceed 0.10 lb/mmBtu and 39.93 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/mmBtu emission limitation was demonstrated through performance testing conducted in December 2010. The average emission rate for NO_x emissions was 0.0305 lb/mmBtu. See f)(2) of this permit for additional NO_x testing requirements.

The tons/year emission rate will be determined by multiplying the lb/mmBtu NO_x emission rate established through performance testing by the heating value for natural gas (1,020 Btu/cu.ft), the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

c. Emission Limitation –

CO emissions shall not exceed 14.26 lbs/hr and 32.89 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (169,804 cu.ft/hr) and 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 (84 lbs of CO/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for CO (84 lbs of CO/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

d. Emission Limitation -

VOC emissions shall not exceed 0.93 lb/hr and 2.15 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (169,804 cu.ft/hr) and 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 VOC (5.5 lbs of VOC/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 or 25A of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for VOC (5.5 lbs of VOC/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

e. Emission Limitation –

SO₂ emissions shall not exceed 0.1 lb/hr and 0.23 ton/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (169,804 cu.ft/hr) and 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 of SO₂/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the AP-42 emission factor for SO₂ (0.6 lb of SO₂/million cubic feet) by the annual natural gas usage (in mmcu.ft) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

f. Emission Limitation -

PM/PM₁₀ emissions shall not exceed 1.29 lbs/hr of and 2.98 tons/year when burning natural gas

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emissions unit (169,804 cu.ft/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 of PM/PM₁₀/million cubic feet).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 5 of 40 CFR Part 60, Appendix A.

The tons/year emission rate shall be determined by multiplying the AP-42 emission factor for PM/PM₁₀ (7.6 lbs PM/PM₁₀/million cubic feet) by the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

g. Emission Limitation -

NO_x emissions shall not exceed 0.12 lb/mmBtu and 0.50 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/mmBtu emission limitation was demonstrated through performance testing conducted in December 2010. The average emission rate for NO_x emissions was 0.0881 lb/mmBtu.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

If the permittee uses the fuel oil for more than a backup/emergency basis (as noted in b)(2)e.), then the permittee may be required to test and comply with the allowable limit of 0.12 lb NO_x/mmBtu for fuel oil.

The tons/year emission rate will be determined by multiplying the lb/mmBtu NO_x emission rate established through performance testing by the heating factor for No. 2 fuel oil (0.14 mmBtu/gallon), the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

h. Emission Limitation –

CO emissions shall not exceed 6.10 lbs/hr and 0.15 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,220 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) for CO (5 lbs/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be determined by multiplying the above AP-42 emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

i. Emission Limitation -

PM/PM₁₀ emissions shall not exceed 4.03 lbs/hr and 0.10 ton/year when burning No. 2 fuel oil

Applicable Compliance Method –

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,220 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) and Table 1.3-2 (5/10) for PM/PM₁₀ (3.3 lbs/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 5 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be determined by multiplying the above AP-42 emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

j. Emission Limitation -

SO₂ emissions shall not exceed 6.93 lbs/hr and 0.17 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,220 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) emission factor for SO₂ (142*S lbs/1,000gal where S = %weight of sulfur in the No. 2 fuel oil).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the above lb/1,000 gal emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

k. Emission Limitation -

VOC emissions shall not exceed 0.24 lb/hr and 0.01 ton/year when burning No. 2 fuel oil

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (1,220 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-3(5/10) emission factor for VOC (0.2 lb/1,000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 or 25A of 40 CFR Part 60, Appendix A.

The ton/year emission rate shall be determined by multiplying the above lb/1,000 gal emission factor by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

l. Emission Limitation-

When burning natural gas in emissions units B005 and B006 (combined total) 39.93 tons of NO_x emissions as a 12-month rolling summation

Applicable Compliance Method -

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(3) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

m. Emission Limitation-

When burning natural gas in emissions units B005 and B006 (combined total) 32.89 tons of CO emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(3) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

n. Emission Limitation -

When burning No. 2 fuel oil in emissions units B005 and B006 (combined total)
0.33 ton of SO₂ emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(2) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

o. Emission Limitation -

When burning No. 2 fuel oil in emissions units B005 and B006 (combined total)
0.99 ton of NO_x emissions as a 12-month rolling summation

Applicable Compliance Method –

Compliance with the above limitation shall be based on the recordkeeping requirement in d)(2) of this permit. Compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108728]

- (2) 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 12 months prior to permit expiration to demonstrate compliance with the allowable mass emission rate for NO_x of 0.10 lb per mmBtu actual heat input while burning natural gas.
 - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 7, 7A, 7C, 7D or 7E of 40 CFR Part

60, Appendix A for NOx. [Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.]

- c. The emission testing shall be conducted while the emissions unit is operating at or near its maximum steam load and employing natural gas as fuel.

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) and OAC rule 3745-110-05]

g) Miscellaneous Requirements

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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

3. B009, RR Building Boiler 9

Operations, Property and/or Equipment Description:

B009 - 121.2 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler

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 operation(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 are identified below. 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# 13-04336 issued November 9, 2004)	<p>From burning natural gas: Nitrogen oxide (NOx) emissions shall not exceed 4.80 lbs/hr. Particulate (PM/PM₁₀) emissions shall not exceed 0.90 lb/hr. Carbon monoxide (CO) emissions shall not exceed 9.98 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.65 lb/hr. Sulfur dioxide (SO₂) emissions shall not exceed 0.07 lb/hr.</p> <p>From burning No. 2 fuel oil: The nitrogen oxide emission limitation specified by this rule in PTI#13-04336 is less stringent than the nitrogen oxide limitation specified in OAC rule 3745-110-03(C). Particulate (PM/PM₁₀) emissions shall not exceed 1.73 lbs/hr. Carbon monoxide (CO) emissions shall not exceed 4.33 lbs/hr. Volatile organic compound (VOC) emissions shall not exceed 0.17 lb/hr. Sulfur dioxide (SO₂) emissions shall not exceed 24.59 lbs/hr.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The requirements established pursuant to this rule also include compliance with the requirements of OAC rule(s) 3745-17-07(A), 3745-31-05(D), and 40 CFR Part 60, Subpart Db.
b.	OAC Rule 3745-31-05(D)(1)(b) Synthetic Minor to avoid NSR	See b)(2)a., b)(2)b., c)(3), and c)(4) below.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c. below for opacity limit when burning natural gas.
d.	OAC rule 3745-17-10(B)(1)	The particulate emission limitation specified in this rule is less stringent than the particulate limitation specified in OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(D)	When burning No. 2 fuel oil, the sulfur dioxide emission limitation specified by this rule is less stringent than the sulfur dioxide emission limitation established pursuant to 40 CFR Part 60 Subpart Db.
f.	OAC rule 3745-110-03(C)	<p>When burning natural gas: The nitrogen oxide emission limitation specified in this rule is less stringent than the nitrogen oxide limitation specified in OAC rule 3745-31-05(A)(3).</p> <p>When burning fuel oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb per mmBtu actual heat input.</p>
g.	40 CFR Part 60 Subpart Db including: 40 CFR 60.42b (j) 40 CFR 60.43b (f) 40 CFR 60.44b (a)	Use of low sulfur oil. See c)(3)a. below. See b)(2)d. below for opacity limit when burning fuel oil. See section c)(5) and c)(6) below. The nitrogen oxide emission limitation specified in this rule is less stringent than the nitrogen oxide emission limitation specified in OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)g. below.

(2) Additional Terms and Conditions

- a. When firing natural gas, the annual emissions resulting from the operation of this emission unit shall not exceed the following limits, based on a rolling, 12-month summation of emissions:

PM₁₀ 2.97 tons
 NO_x 15.77 tons
 CO 32.79 tons
 VOC 2.15 tons
 SO₂ 0.23 ton

- b. When firing No. 2 fuel oil, the annual emissions resulting from the operation of this emission unit shall not exceed the following limits, based on a rolling, 12-month summation of emissions:

PM₁₀ 0.28 ton
 NO_x 2.63 tons
 CO 0.71 ton
 VOC 0.03 ton
 SO₂ 4.04 tons

- c. When burning natural gas, visible particulate emissions shall not exceed 20% opacity, as a six minute average, except as provided by rule.
- d. When burning No. 2 fuel oil, visible particulate emissions shall not exceed 20% opacity, as a six minute average, except for one 6-minute period per hour of not more than 27% opacity.
- e. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

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

- f. 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.
- g. This emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Such periods include the intentional shut off of the gas supply as a safety measure during building and/or street renovations or construction. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.
- h. If the permittee uses the fuel oil for more than a backup/emergency basis (as noted in b)(2)g. above), then the permittee may be required to comply with the allowable limit of 0.12 lb NO_x/mmBtu for fuel oil.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (3) The following restrictions apply when burning No. 2 fuel oil:

- a. the quality of the No. 2 fuel oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is equal to or less than 0.5 percent sulfur, by weight; and
- b. the maximum annual No. 2 fuel oil usage for this emission unit shall not exceed 284,387 gallons, based on a rolling, 12-month summation of the annual usage.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (4) The following restrictions apply when burning natural gas:

- a. the maximum annual natural gas usage for this emission unit shall not exceed 781.2 mm scf/yr, based on a rolling, 12-month summation of the annual usage.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (5) The permittee shall operate low NOx burners at all times this emission unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (6) The permittee shall operate and maintain equipment to continuously monitor and record the NOx emissions at all times this emission unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4336]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (2) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Cleveland Division of Air Quality (Cleveland DAQ).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (3) The permittee shall maintain monthly records of the following information for this emission unit:

- a. the natural gas consumption (mm scf);
- b. the No. 2 fuel oil consumption (gallons);
- c. the monthly operating hours while burning No.2 fuel oil;
- d. the rolling, 12-month summation of the natural gas consumption figures (mm scf);
and

- e. the rolling, 12-month summation of the No. 2 fuel oil consumption figures (gallons).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (4) The permittee shall perform weekly 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.

In lieu of the weekly visible emissions checks, the permittee may install, operate, and maintain equipment to continuously monitor and record the opacity from this emission unit in accordance with 40 CFR Part 60.13.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (5) During each day that No. 2 fuel oil is combusted in this emission unit, the permittee shall perform a 6-minute opacity observation consistent with USEPA Method 9. If the average opacity exceeds 10 percent, the observer must collect two additional 6-minute sets of visible emission readings. This requirement does not apply when the only reason fuel oil is combusted is to test the fuel delivery and burner system. The fuel delivery and burner system testing shall not exceed 2 hours in any one day. Records of the date and time of each observation and the results of each observation shall be maintained. In lieu of the daily opacity checks, the permittee may install, operate, and maintain equipment to continuously monitor and record the opacity from this emission unit in accordance with 40 CFR Part 60.13.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (6) 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 NO_x 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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336 and 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

- (7) The permittee shall 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:

- i. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;
- ii. emissions of NO_x in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- iii. results of quarterly cylinder gas audits;
- iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- v. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- vi. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;
- vii. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;
- viii. 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,
- ix. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336 and 40 CFR 60.13 and 40 CFR Part 60, Appendices B & F]

- (8) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of 5 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 the permit. Such records may be maintained in computerized form.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (9) Per 40 CFR 60.49b(r), the permittee shall obtain and maintain fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in 40 CFR 60.41b; however, the oil need not meet the fuel nitrogen content in this definition.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336 and 40 CFR 60.49b(r)]

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 and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (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 Chapters 3745-14 and 3745-23, and any other applicable rules or regulations.

The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

- b. These quarterly reports shall be submitted to the Cleveland DAQ by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

- iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any 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 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 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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336 and 40 CFR 60.7]

- (3) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing that the rolling 12-month summation of No. 2 fuel oil usage exceeded 284,387 gallons for this emission unit. The notification shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include the following:
- a. a copy of any such record;
 - b. an identification of the probable cause for such deviation; and
 - c. any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (4) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing that the rolling 12-month summation of natural gas usage exceeded 781.2 mm scf for this emission unit. The notification shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include the following:
- a. a copy of any such record;
 - b. an identification of the probable cause for such deviation; and
 - c. any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (5) The permittee shall notify the Cleveland DAQ in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from d)(2). The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

- (6) The permittee submit deviation (excursion) reports to the Cleveland DAQ that identify each day during which the opacity limitation during No. 2 fuel oil combustion for this emissions unit has been exceeded. The notification shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include the following:
- a. a copy of any such record;
 - b. an identification of the probable cause for such deviation; and
 - c. any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

(7) The permittee shall submit an annual report to the Cleveland DAQ that includes:

- a. the total particulate, sulfur dioxide, organic compound, nitrogen oxides, and carbon monoxide emissions for this emission unit;
- b. the total No. 2 fuel oil usage (gallons) for this emission unit; and
- c. the total natural gas usage (mm scf) for this emission unit.

This report shall be submitted to the Cleveland DAQ by April 1 of each year and shall cover the preceding calendar year.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

(8) The permittee shall submit quarterly reports to the Cleveland DAQ certifying that only very low sulfur oil meeting the definition for distillate oil (except nitrogen content) in 40 CFR 60.41B was combusted during the preceding quarter.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

(9) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the annual operating hours for this emissions unit while burning No. 2 fuel oil. Each report shall be submitted within 30 days after the deviation occurs.

[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 method(s):

a. Emission Limitation:

NO_x emissions shall not exceed 4.80 lbs/hr when burning natural gas

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.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336 and 40 CFR 60.13 and 40 CFR Part 60, Appendices B & F]

b. Emission Limitation:

PM₁₀ emissions shall not exceed 0.9 lb/hr when burning natural gas

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emission unit (0.118 mmcf/hr) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.4, Table 1.4-2 (7/98) emission factor for PM₁₀ (7.6 lbs of PM/mmcf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

c. Emission Limitation:

CO emissions shall not exceed 9.98 lbs/hr when burning natural gas

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emission unit (0.118 mmcf/hr) by the USEPA 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 (84 lbs of CO/mmcf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

d. Emission Limitation:

VOC emissions shall not exceed 0.65 lb/hr when burning natural gas

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emission unit (0.118 mmcf/hr) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.4, Table 1.4-2 (7/98) emission factor for VOC (5.5 lbs of VOC/mmcf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

e. Emission Limitation:

SO₂ emissions shall not exceed 0.07 lb/hr when burning natural gas

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly natural gas usage for this emission unit (0.118 mmcf/hr) by the USEPA 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 of SO₂/mmcf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

f. Emission Limitation:

NO_x emissions shall not exceed 0.12 lb per mmBtu actual heat input when burning No. 2 fuel oil

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.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C) and 40 CFR 60.13 and 40 CFR Part 60, Appendices B & F]

g. Emission Limitation:

PM₁₀ emissions shall not exceed 1.73 lbs/hr when burning No. 2 fuel oil

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly No. 2 fuel oil usage for this emission unit (866 gallons/hr) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-1 (5/10) emission factor for PM₁₀ (2 lbs of PM₁₀/1,000 gallons).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

h. Emission Limitation:

CO emissions shall not exceed 4.33 lbs/hr when burning No. 2 fuel oil

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly No. 2 fuel oil usage for this emission unit (866 gallons/hr) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-1 (5/10) emission factor for CO (5 lbs of CO/1,000 gallons).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

i. Emission Limitation:

VOC emissions shall not exceed 0.17 lb/hr when burning No. 2 fuel oil

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly No. 2 fuel oil usage for this emission unit (866 gallons/hr) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-3 (5/10) emission factor for VOC (0.2 lb of VOC/1,000 gallons).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

j. Emission Limitation:

SO₂ emissions shall not exceed 24.59 lbs/hr when burning No. 2 fuel oil

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity for this emissions unit (866 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) emission factor for SO₂ (142*S lbs/1,000gal where S = % by weight of sulfur in the No. 2 fuel oil).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

k. Emission Limitation:

15.77 tons of NO_x emissions per rolling, 12-month summation when burning natural gas

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational natural gas usage limitation (781.2 mmcf/rolling, 12-month summation) by the average heat content of the natural gas (may assume 1,020 Btu/cu.ft in the absence of actual data) and then multiplying by the most recent performance test emissions factor (currently 0.0396 lb of NO_x /mm Btu for natural gas combustion per manufacturers data , NATCOM Emissions-Reduction

Equipment Summary Sheet) and then dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

l. Emission Limitation:

2.97 tons of PM₁₀ emissions per rolling, 12-month summation when burning natural gas

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational natural gas usage limitation (781.2 mmcf/rolling, 12-month summation) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.4, Table 1.4-2 (7/98) emission factor for PM₁₀ (7.6 lbs of PM₁₀/mmcf) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

m. Emission Limitation:

32.79 tons of CO emissions per rolling, 12-month summation when burning natural gas

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational natural gas usage limitation (781.2 mmcf/rolling, 12-month summation) by the USEPA 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 (84 lbs of CO/mmcf) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

n. Emission Limitation:

2.15 tons of VOC emissions per rolling, 12-month summation when burning natural gas

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational natural gas usage limitation (781.2 mmcf/rolling, 12-month summation) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.4, Table 1.4-2 (7/98) emission factor for VOC (5.5 lbs of VOC/mmcf) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

o. Emission Limitation:

0.23 tons of SO₂ emissions per rolling, 12-month summation when burning natural gas

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational natural gas usage limitation (781.2 mmcf/rolling, 12-month summation) by the USEPA 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 of SO₂/mmcf) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

p. Emission Limitation:

2.63 tons of NO_x emissions per rolling, 12-month summation when burning No. 2 fuel oil

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational No. 2 fuel oil usage limitation (284,387 gallons/rolling, 12-month summation) by the average heat content of the No. 2 fuel oil (may assume 140,000 Btu/gallon in the absence of actual data) and then multiplying by the most recent performance test emissions factor (currently 0.132 lb of NO_x/mmBtu for No. 2 fuel oil combustion per manufacturers data, NATCOM Emissions-Reduction Equipment Summary Sheet) and then dividing by 2,000

lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

q. Emission Limitation:

0.28 ton of PM₁₀ emissions per rolling, 12-month summation when burning No. 2 fuel oil

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational No. 2 fuel oil usage limitation (284,387 gallons/rolling, 12-month summation) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-1 (5/10) emission factor for PM₁₀ (2 lbs of PM₁₀/1,000 gallons) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

r. Emission Limitation:

0.71 ton of CO emissions per rolling, 12-month summation when burning No. 2 fuel oil

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational No. 2 fuel oil usage limitation (284,387 gallons/rolling, 12-month summation) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-1 (5/10) emission factor for CO (5 lbs of CO/1,000 gallons) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

s. Emission Limitation:

0.03 ton of VOC emissions per rolling, 12-month summation when burning No. 2 fuel oil

Applicable Compliance Method:

The rolling, 12-month summation emissions limitation was established by multiplying the operational No. 2 fuel oil usage limitation (284,387 gallons/rolling, 12-month summation) by the USEPA Reference Document AP-42, 5th Edition Compilation of Air Pollution Emission Factors Section 1.3, Table 1.3-3 (5/10) emission factor for VOC (0.2 lb of VOC/1,000 gallons) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

t. Emission Limitation:

4.04 tons of SO₂ emissions per rolling, 12-month summation when burning No. 2 fuel oil

Applicable Compliance Method:

Compliance with the rolling 12-month emission limitation shall be determined by multiplying the maximum 12-month fuel oil burning limitation for this emissions unit (284,387 gals/yr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) emission factor for SO₂ (142*S lbs/1,000gal where S = % by weight of sulfur in the No. 2 fuel oil) and dividing by 2,000 lbs/ton. Therefore, compliance with the rolling, 12-month emissions limitation shall be demonstrated provided compliance is maintained with the rolling, 12-month usage restriction.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

u. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule, when burning natural gas.

Applicable Compliance Method:

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

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) PTI# 13-4336]

v. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average except for one 6-minute period per hour of not more than 27% opacity when burning No. 2 fuel oil.

Applicable Compliance Method:

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

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) PTI# 13-4336]

w. Emission Limitation:

The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent.

Applicable Compliance Method:

Compliance with the allowable sulfur content limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4336]

g) Miscellaneous Requirements

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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

4. Emissions Unit Group - 12.55 mmBtu/hr natural gas/ No.2 oil fired boilers: B024, B025, B026, B027

EU ID	Operations, Property and/or Equipment Description
B024	12.55 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler
B025	12.55 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler
B026	12.55 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler
B027	12.55 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler

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 operation(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 are identified below. 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)(a)(ii) as effective 12/01/06	See b)(2)c. below.
b.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001 (PTI# P0108077 issued May 26, 2011)	Nitrogen oxide (NOx) emissions shall not exceed 1.78 lbs/hr and 7.79 tons/year. Carbon monoxide (CO) emissions shall not exceed 1.05 lbs/hr and 4.6 tons/year. Volatile organic compounds (VOC) emissions shall not exceed 0.07 lb/hr and 0.31 ton/year. Particulate emissions shall not exceed 1.09 tons/year. See b)(2)d. below.
c.	OAC rule 3745-31-05(D)	Sulfur dioxide (SO2) emissions shall not exceed 1.57 TPY as a rolling, 12-month summation.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		This emissions unit shall not operate more than 500 hours per year while burning No. 2 fuel oil as a rolling, 12-month summation.
d.	OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 40 CFR Part 60 Subpart Dc.
e.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.
f.	OAC rule 3745-18-06(D)	When burning No. 2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to 40 CFR Part 60 Subpart Dc .
g.	40 CFR Part 60 Subpart Dc	0.5 lb of SO ₂ emissions per mmBtu when burning No. 2 fuel oil. Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.
h.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

- a. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- b. The lb/mmBtu actual heat input and tons per year emission limitations, except for SO₂, are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations.
- c. 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 NO_x, PE, VOC and CO from this emissions unit since the potential to emit for NO_x, PE, VOC and CO are less than ten tons per year.

Permit to Install P0108077 for this emissions unit takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for SO₂ emissions:

The maximum annual operating hours for this emissions unit while burning No. 2 fuel oil shall not exceed 500 hours/year.

- 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 emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Such periods include the intentional shut off of the gas supply as a safety measure during building and/or street renovations or construction. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (2) The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (3) The maximum annual operating hours for this emissions unit while burning No.2 fuel oil shall not exceed 500 hours/year, based upon a rolling, 12-month summation of the operating hours.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (4) The emissions of SO₂ from this emissions unit while burning No.2 fuel oil shall not exceed 1.57 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0108077]

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

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

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

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. **Alternative 1:**

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. **Alternative 2:**

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077 and 3745-18-04(E)(3) and 3745-18-04(I)]

- (3) The permittee shall maintain monthly records of the following information:
- a. the total hours of operation of the emissions unit while burning No. 2 fuel oil for each month; and
 - b. the rolling, 12-month summation of the operating hours while burning No.2 fuel oil.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

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 and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (2) The permittee shall notify the Cleveland DAQ in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from d)(2) above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (3) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month limitation on the hours of operation while burning No.2 fuel oil. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (4) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the rolling, 12-month emission limitation for SO₂. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

- (5) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the annual operating hours for this emissions unit while burning No. 2 fuel oil for the purpose of determining compliance with term b)(2)e. above. Each report shall be submitted within 30 days after the deviation occurs.

[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(s):

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077 and 40 CFR Part 60 Subpart Dc]

b. Emission Limitation(s):

Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input and 1.09 tons/year.

Applicable Compliance Method:

When firing natural gas, compliance with the lb/mmBtu emission limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0125 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 particulates (7.6 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (12.55 mmBtu/hr).

When firing No. 2 fuel oil, compliance with the lb/mmBtu emission limitation shall be determined by converting the 2 lbs PE/10³ gal emission factor (taken from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98)) into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

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

The tons/year emission rate shall be based on multiplying the above lb/mmBtu emission rate by the maximum hourly heat input capacity of the emissions unit (12.55 mmBtu/hr), the annual operating hours of the emissions unit and the factor (1.0 ton/2,000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

c. Emission Limitation(s):

SO₂ emissions shall not exceed 0.50 lb per mmBtu actual 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 1.3, Table 1.3-1 (5/10). Compliance with the lb/mmBtu emission limitation shall be based upon the record keeping in d)(2).

Sulfur dioxide emissions from liquid fuel samples shall be calculated as follows:

$$ER = [(1 \times 10^6) / H] \times D \times S \times 1.974$$

where:

ER = the emission rate in pounds of sulfur dioxide per mmBtu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077 and 40 CFR Part 60 Subpart Dc]

d. Emission Limitation(s):

1.57 tons of SO₂ emissions as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the average lb SO₂/mmBtu emission rate by the maximum heat input of the emissions unit, the annual operating hours of the emissions unit while burning No. 2 fuel oil and then dividing by the factor (2,000 lbs/ton).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

e. Emission Limitations:

Nitrogen oxide (NO_x) emissions shall not exceed 1.78 lbs/hr and 7.79 tons/year.

Applicable Compliance Methods:

When firing natural gas, compliance with the lb/hr emission limitation shall be determined by multiplying an emission factor of 100 lbs of NO_x/mmcf by the emissions unit's maximum hourly natural gas firing rate (0.0125 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).

When firing No.2 fuel oil, compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity of each emissions unit (89 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) for NO_x (20 lbs/1,000 gal).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while firing No.2 fuel oil.

The ton per year limitation was developed by multiplying the hourly NO_x emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

f. Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 1.05 lbs/hr and 4.6 tons/year.

Applicable Compliance Methods:

When firing natural gas, compliance with the lb/hr emission limitation shall be determined by multiplying an emission factor of 84 lbs of CO/mmcf by the emissions unit's maximum hourly natural gas firing rate (0.0125 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).

When firing No.2 fuel oil, compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity of each emissions unit (89 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) for CO (5 lbs/1,000 gal).

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

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

g. Emission Limitations:

Volatile organic compounds (VOC) emissions shall not exceed 0.07 lb/hr and 0.31 ton/year.

Applicable Compliance Methods:

When firing natural gas, compliance with the lb/hr emission limitation shall be determined by multiplying an emission factor of 5.5 lbs of VOC/mmcf by the emissions unit's maximum hourly natural gas firing rate (0.0125 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).

When firing No.2 fuel oil, compliance with the lb/hr emission limitation shall be determined by multiplying the maximum hourly fuel oil burning capacity of each emissions unit (89 gals/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-3(5/10) for VOC (0.556 lb/1,000 gal).

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 while firing natural gas.

The ton per year limitation was developed by multiplying the hourly VOC emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0108077]

g) Miscellaneous Requirements

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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

5. Emissions Unit Group - 16.33 mmBtu/hr natural gas fired boilers: B007, B008,

EU ID	Operations, Property and/or Equipment Description
B007	16.33 mmBtu/hr natural gas fired boiler for hot water
B008	16.33 mmBtu/hr natural gas fired boiler for hot water

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 operation(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 are identified below. 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 P0109910 issued on April 17, 2010)	Nitrogen oxide (NOx) emissions shall not exceed 0.80 lb/hr and 3.51 tons/year. Carbon monoxide (CO) emissions shall not exceed 1.34 lbs/hr and 5.87 tons/year. Organic compound (OC) emissions shall not exceed 0.18 lb/hr and 0.77 ton/year. Sulfur dioxide (SO2) emissions shall not exceed 0.009 lb/hr and 0.04 ton/year. Particulate emissions shall not exceed 1.43 tons/year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-10(B)(1).
b.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
d.	40 CFR Part 60 Subpart Dc	No emission limitation for natural gas, but still an applicable rule.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# P0109910]

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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

(2) Pursuant to 40 CFR Part 60 Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted each month.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

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 method(s):

a. Emission Limitation –

Visible particulate emissions from any stack shall not exceed 20% opacity as a six-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) PTI# P0109910]

b. Emission Limitation –

Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input and 1.43 tons/year.

Applicable Compliance Method –

Compliance with the lb/mmBtu emission limitation shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.016 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 particulates (7.6 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (16.33 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

The tons/year emission rate will be based on multiplying the above lb/mmBtu emission rate by the maximum hourly heat input capacity of the emissions unit (16.33 mmBtu/hr), the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

c. Emission Limitation –

Nitrogen oxide (NO_x) emissions shall not exceed 0.80 lb/hr and 3.51 tons/year.

Applicable Compliance Method –

Compliance with the lb/hr emission limitation shall be determined by multiplying 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 NO_x (50 lb/mmcf) by the maximum hourly heat input capacity (16.33 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

The tons/year emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

d. Emission Limitation –

Carbon monoxide (CO) emissions shall not exceed 1.34 lbs/hr and 5.87 tons/year.

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying 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 (84 lb/mmcf) by the maximum hourly heat input capacity (16.33 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The tons/year emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

e. Emission Limitation –

Organic compound (OC) emissions shall not exceed 0.18 lb/hr and 0.77 ton/year.

Applicable Compliance Method -

Compliance with the lb/hr emission limitation shall be determined by multiplying 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 OC (11 lb/mmcf) by the maximum hourly heat input capacity (16.33 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

f. Emission Limitation –

Sulfur dioxide (SO₂) emissions shall not exceed 0.009 lb/hr and 0.04 ton/year.

Applicable Compliance Method –

Compliance with the lb/hr emission limitation shall be determined by multiplying 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/mmcf) by the maximum hourly heat input capacity (16.33 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

The ton/year emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# P0109910]

g) Miscellaneous Requirements

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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

6. Emissions Unit Group - 85.7 mmBtu/hr natural gas/ No.2 oil fired boilers: B003, B004,

EU ID	Operations, Property and/or Equipment Description
B003	85.7 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler
B004	85.7 mmBtu/hr natural gas fired (No.2 fuel oil as backup) boiler

- 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 operation(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 are identified below. 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# 13-01573 issued August 6, 1986)	Nitrogen oxide (NO _x) emissions shall not exceed 28 tons/year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.
d.	OAC rule 3745-18-06(D)	When burning No. 2 fuel oil, sulfur dioxide emissions shall not exceed 1.6 lbs per mmBtu actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-110-03(B)	<p>When burning natural gas: Nitrogen oxide (NOx) emissions shall not exceed 0.10 lb per mmBtu actual heat input.</p> <p>When burning fuel oil: Nitrogen oxide (NOx) emissions shall not exceed 0.12 lb per mmBtu actual heat input.</p>
f.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)a. below.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Such periods include the intentional shut off of the gas supply as a safety measure during building and/or street renovations or construction. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

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

(2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.

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

d) Monitoring and/or Recordkeeping Requirements

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

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

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

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-18-04(E)(3) and 3745-18-04(I)]

(3) The permittee shall maintain monthly records of the hours of operation of the emissions unit while burning No. 2 fuel oil.

[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 and/or number two fuel oil 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 notify the Cleveland DAQ in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from d)(2) above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-15-03(B)(1)(a) and 3745-15-03(C)]

- (3) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which identify all exceedances of the annual operating hours for this emissions unit while burning No. 2 fuel oil. Each report shall be submitted within 30 days after the deviation occurs.

[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 method(s):

a. Emission Limitation –

Visible particulate emissions from any stack shall not exceed 20% opacity as a six-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) PTI#13-1573]

b. Emission Limitation –

Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.

Applicable Compliance Method –

Compliance with the lb/mmBtu emission limitation shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.085 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 particulates (7.6 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (87.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI#13-1573]

c. When burning No. 2 fuel oil, sulfur dioxide emissions shall not exceed 1.6 lbs per mmBtu actual heat input.

Applicable Compliance Method:

Continuous compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation.

Sulfur dioxide emissions from liquid fuel samples shall be calculated as follows:

$$ER = [(1 \times 10^6) / H] \times D \times S \times 1.974$$

where:

ER = the emission rate in pounds of sulfur dioxide per MMBtu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and 3745-18-04(E) and 3745-18-04(F)(2)]

d. Emission Limitation -

NOx emissions shall not exceed 0.12 lb per mmBtu actual heat input year when burning No.2 fuel oil

Applicable Compliance Method –

If the permittee uses the fuel oil for more than a backup/emergency basis (as noted in b)(2)a.), then the permittee may be required to test and comply with the allowable limit of 0.12 lb NOx/mmBtu for fuel oil.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

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

e. Emission Limitation –

NOx emissions shall not exceed 0.10 lb per mmBtu actual heat input when burning natural gas

Applicable Compliance Method -

Compliance with the lb/mmBtu emission limitation was demonstrated through performance testing conducted in October 2009. The average emission rate for NOx emissions was 0.0366 lb/mmBtu. See f)(2) of this permit for additional NOx testing requirements.

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

f. Emission Limitation –

NOx emissions shall not exceed 28 tons/year.

Applicable Compliance Method –

The ton/year emission rate shall be determined by multiplying the lb/mmBtu NOx emission rate established through performance testing by the heating value for natural gas (1,020 Btu/cu.ft), the annual natural gas usage (in mmcf) for this emissions unit and the factor (1.0 ton/2,000 lbs).

The ton/year emission rate shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3 Table 1.3-1(5/10) emission factor for NOx (20 lbs/1,000 gallons) by the annual No. 2 fuel oil usage (in gallons) for this emissions unit and the factor (1.0 ton/2,000 lbs).

Total NOx emissions shall be the sum of natural gas emissions plus the fuel oil emissions.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI#13-1573]

- (2) 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 12 months prior to permit expiration to demonstrate compliance with the allowable mass emission rate for NOx of 0.10 lb per mmBtu actual heat input while burning natural gas.
 - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 7, 7A, 7C, 7D or 7E of 40 CFR Part 60, Appendix A for NOx. [Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.]
 - c. The emission testing shall be conducted while the emissions unit is operating at or near its maximum steam load and employing natural gas as fuel.

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) and OAC rule 3745-110-05]

g) **Miscellaneous Requirements**

- (1) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance.

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