



Environmental
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

9/18/2012

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

Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: Cincinnati Children's Hospital Medical Center
Facility ID: 1431071395
Permit Type: Renewal
Permit Number: P0109206

Dear Ms. Blakley:

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

Sincerely,

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

Cc: Southwest Ohio Air Quality Agency



PROPOSED

Division of Air Pollution Control Title V Permit

for

Cincinnati Children's Hospital Medical Center

Facility ID:	1431071395
Permit Number:	P0109206
Permit Type:	Renewal
Issued:	9/18/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Title V Permit
for
Cincinnati Children's Hospital Medical Center

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements..... 3
3. Scheduled Maintenance..... 6
4. Risk Management Plans 6
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees..... 8
9. Marketable Permit Programs..... 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility..... 11
16. Emergencies..... 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels..... 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only..... 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting 15
28. Permit Transfers 15



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	15
B. Facility-Wide Terms and Conditions.....	16
C. Emissions Unit Terms and Conditions	19
1. B022, 34 MMBtu/hr UNILUX Boiler	20
2. Emissions Unit Group 1 EU's (PTI 14-5630):	29
3. Emissions Unit Group 2 EU's (PTI 14-5718):	39



Authorization

Facility ID: 1431071395
Facility Description: Speciality Hospital
Application Number(s): A0040532
Permit Number: P0109206
Permit Description: Renewal Title V permit for Cincinnati Children's Hospital Medical Center which includes several natural gas/No.2 fuel oil-fired boilers that provide heat to the health care and research facility.
Permit Type: Renewal
Issue Date: 9/18/2012
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0098337

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

Cincinnati Children's Hospital Medical Center
3333 Burnet Avenue
Cincinnati, OH 45229-3039

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

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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 Southwest Ohio Air Quality Agency. 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 Southwest Ohio Air Quality Agency.

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

3. Scheduled Maintenance

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

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

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



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

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

5. Title IV Provisions

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

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

6. Severability Clause

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

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

7. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the



Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

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

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

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



- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

14. Permit Shield

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

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

15. Operational Flexibility

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

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

16. Emergencies

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

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

17. Off-Permit Changes

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



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

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

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

18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

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

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

20. Permit to Install Requirement

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

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



21. Air Pollution Nuisance

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

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

22. Permanent Shutdown of an Emissions Unit

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

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

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

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

23. Title VI Provisions

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

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

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



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

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

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

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



27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following insignificant emissions units are located at this facility:
 - a) B016- 8.4 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler (PTI 14-05630);
 - b) B017- 8.4 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler (PTI 14-05630);
 - c) P001 - 2.2 MW Diesel Fired Emergency Back-up Generator (PBR);
 - d) P002 – 2.2 MW Diesel Fired Emergency Back-up Generator (PBR);
 - e) P003 - 2.2 MW Diesel Fired Emergency Back-up Generator (PBR);
 - f) P004 - 1.75 MW Diesel Fired Emergency Back-up Generator (PBR);
 - g) P005 - 1.75 MW Diesel Fired Emergency Back-up Generator (PBR);
 - h) P008 - 1.5 MW Diesel Fired Emergency Back-up Generator (PBR);
 - i) P009 - 1.5 MW Diesel Fired Emergency Back-up Generator (PBR);
 - j) P010 - 0.25 MW Diesel Fired Emergency Back-up Generator (PBR);
 - k) P011 - 0.25 MW Diesel Fired Emergency Back-up Generator (PBR);
 - l) P014 - 2.25 MW Diesel Fired Emergency Back-up Generator(PBR);
 - m) P015 - 2.25 MW Diesel Fired Emergency Back-up Generator (PBR);
 - n) P016 - 0.5 MW Diesel Fired Emergency Back-up Generator (PBR);
 - o) P017 - 2.25 MW Diesel Fired Emergency Back-up Generator (PBR);
 - p) P018 - 2.25 MW Diesel Fired Emergency Back-up Generator (PBR);
 - q) P019 - Ethylene Oxide Sterilization Unit*; and
 - r) P020 - Ethylene Oxide Sterilization Unit*.

*Emissions units P019 and P020 are subject to the National Emission Standard for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63 Subpart WWWW (40 CFR 63.10382-63.10448) which is an area source MACT/GACT rule that the Ohio EPA does have the delegated authority to implement. The permittee shall comply with 40 CFR 63.10382-63.10448 in its entirety.

Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. 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 SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

3. The Ohio EPA has determined that this facility is subject to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, USEPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by USEPA. For more information on the area source rules, please refer to the following USEPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>

The area source rules that apply are 40 CFR Part 63 Subpart JJJJJJ Industrial, Commercial, Institutional Boiler for emissions units B008 thru B022 and 40 CFR Part 63 Subpart ZZZZ Stationary Reciprocating Internal Combustion Engines (RICE) for emissions units P001 thru P005.

4. The following abbreviations are used throughout this permit.

Nitrogen Oxides = NOx

Carbon Monoxide =CO

Organic Compounds = OC

Volatile Organic Compounds = VOC

Particulate emissions = PE

Particulate emissions and Particulate matter less than 10 microns in diameter = PE/PM10

Sulfur dioxide =SO2

Hazardous Air Pollutant = HAP

Tons per year = TPY

MM = Million

CFR = Code of Federal Regulations

OAC = Ohio Administrative Code

C. Emissions Unit Terms and Conditions



1. B022, 34 MMBtu/hr UNILUX Boiler

Operations, Property and/or Equipment Description:

34 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired 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) As part of this permitting project for purposes of New Source Review permitting, the permittee is installing two 2.25 megawatt (MW) emergency generators powered by internal combustion diesel engines that are limited by the 500 hour operating restriction in OAC 3745-31-03(A)(4)(b) and taken together with emissions unit B022 - 34 mmBtu/hr natural gas /No. 2 fuel oil fired boiler contained within this permit their NOx emissions will be limited to 38.97 tons per year, based upon a 12-month summation of their monthly NOx emissions.

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(D) Synthetic Minor to avoid Non-attainment New Source Review and Prevention of Significant Deterioration (PTI P0109316)	Nitrogen Oxides (NOx) emissions shall not exceed 8.16 tons per year based upon a rolling, 12-month summation. See c)(1) through c)(3).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI P0109316)	When burning natural gas: Nitrogen Oxides (NOx) emissions shall not exceed 0.08 lb/MMBtu of actual heat input. When burning No. 2 fuel oil: Nitrogen Oxides (NOx) emissions shall not exceed 0.16 lb/mmBtu of actual heat input. Particulate emissions (PE) and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.020 lb/mmBtu and 2.04 tons per year (TPY).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Organic compound (OC) emissions shall not exceed 0.0054 lb/mmBtu and 0.55 +TPY. Carbon monoxide (CO) emissions shall not exceed 0.084 lb/mmBtu and 8.57 TPY. Sulfur Dioxide (SO2) emissions shall not exceed 0.052 lb/mmBtu and 2.56 TPY. See c)(1) - c)(3) and b)(2)d.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 (PTI P0109316)	See b)(2)f.
d.	OAC rule 3745-17-10(B)(1)	Particulate Emissions (PE) shall not exceed 0.020 lb/mmBtu of actual heat input.
e.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-05(C).
f.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart Dc.
g.	40 CFR Part 60 Subpart Dc	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except for one 6-minute period per hour not more than 27 percent opacity. The SO2 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3) and 3745-31-05(C).
h.	OAC rule 3745-31-05(C), as effective 12/01/06 (PTI P0109316)	See term and condition b)(2)e.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas and/or No. 2 fuel oil, fuel usage limitations, the use of low NOx burners, and the emission limitations listed in b)(1) above.

- b. 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).
- c. The lb/mmBtu actual heat input emission limitation, for NO_x, is based on the emissions unit's potential to emit. Therefore, no monitoring, record keeping and reporting requirements are necessary to ensure ongoing compliance with this emission limitation.
- 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, then these emission limitations/control measures no longer apply.
- e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install P0109316 for this air contaminant source takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) under OAC rule 3745-31-05(A)(3):

- i. for Sulfur Dioxide (SO₂) emissions: the permittee shall use ultra-low sulfur No. 2 fuel oil to ensure the controlled potential to emit is less than 10.0 tons per year. The No. 2 fuel oil sulfur content shall not exceed 0.05 percent sulfur by weight; and
 - ii. for Carbon Monoxide (CO) emissions: the permittee shall limit the natural gas use to the amounts provided in c)(3) below.
- f. 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 Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM₁₀ and OC emissions from this air contaminant source since the uncontrolled potential to emit for PE/PM₁₀ and OC are less than 10 tons/year each.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))
- (2) The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 720,000 gallons per rolling, 12-month period. Compliance with the annual No. 2 fuel oil usage limitation shall be based upon a rolling, 12-month summation of the oil usage rates. The usage of a combination of No. 2 fuel oil and natural gas shall be in such quantities to maintain compliance with the rolling, 12-month NOx emission limitation in a)(1).
(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))
- (3) The maximum annual natural gas usage rate for this emissions unit shall not exceed 204.0 million cubic feet per rolling, 12-month period. Compliance with the annual natural gas usage limitation shall be based upon a rolling, 12-month summation of the gas usage rates. The usage of a combination of No. 2 fuel oil and natural gas shall be in such quantities to maintain compliance with the rolling, 12-month NOx emission limitation in a)(1).
(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3)).

d) Monitoring and/or Recordkeeping Requirements

- (1) 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 3745-31-05(A)(3), OAC 3745-18-04, and 3745-77-07(C)(1))

- (2) The permittee shall maintain monthly records of the following information:
- the total volume of natural gas (million ft³) burned in this emissions unit;
 - the total number of gallons of No. 2 fuel oil used in this emissions unit for each month;
 - the rolling, 12-month summation of the million ft³ of natural gas used;
 - the rolling, 12-month summation of the gallons of No. 2 fuel oil used; and
 - the type and total amount of fuel, other than natural gas or No. 2 fuel oil, burned in this emissions unit.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the rolling, 12-month summation emission limitation:
- the total emissions, in tons, for NO_x, when burning any combination of fuels; and
 - the rolling, 12-monthly summation emissions total, in tons, for NO_x, when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months).

(Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install P0109316 issued on

2/2/2012: d)(1)-d)(3). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the allowable sulfur content limitation based upon the calculated sulfur dioxide emission rates from d)(1) above. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (2) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 30 days after the deviation occurs.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) The permittee shall submit deviation (excursion) reports to the Southwest Ohio Air Quality Agency which identify all exceedances of the following:
- a. an identification of all exceedances of the rolling, 12-month No. 2 fuel oil usage limitation;
 - b. an identification of all exceedances of the rolling, 12-month natural gas usage limitation; and
 - c. an identification of all exceedances of the rolling, 12-month emission limitation for NOx.

Unless otherwise specified, the deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(Authority for term: OAC rules 3745-31-05(D)(1)(a) and 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install P0109316 issued on 2/2/2012: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install. .



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except for one 6-minute period per hour not more than 27 percent opacity.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

b. Emission Limitation:

Particulate emissions (PE) and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.020 lb/mmBtu and 2.04 tons per year (TPY).

Applicable Compliance Method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs of total PM/mm cu. ft., and then dividing by the maximum hourly heat input of the emissions unit (mmBtu/hr).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (in 1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 2 lbs of PM/1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (mmBtu/hr).

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.

c. Emission Limitation:

Less than 10.0 tons per year SO₂.

Sulfur Dioxide (SO₂) emissions shall not exceed 0.052 lb/mmBtu and 2.56 TPY

Applicable Compliance Method:

The actual annual emission rate shall be calculated by multiplying the actual fuel usages by the emission factors from AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor for natural gas burning and AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (5/10) for No. 2 fuel oil burning.

d. Emission Limitation:

Less than 10.0 tons per year CO.

Carbon monoxide (CO) emissions shall not exceed 0.084 lb/mmBtu and 8.57 TPY.

Applicable Compliance Method:

The actual annual emission rate shall be calculated by multiplying the actual fuel usages by the emission factors from AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor for natural gas burning and AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (5/10) for No. 2 fuel oil burning.

e. Emission Limitation:

Organic compound (OC) emissions shall not exceed 0.0054 lb/mmBtu and 0.55 TPY.

Applicable Compliance Method:

The actual emission rate shall be calculated by multiplying the actual fuel usages by the emission factors from AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor for natural gas burning and AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-3 (5/10) for No. 2 fuel oil burning.

f. Emission Limitations:

0.08 lbNOx/mmBtu of actual heat input (natural gas firing);

0.16 lbNOx/mmBtu of actual heat input (No. 2 fuel oil firing); and

8.16 TPY NOx (combined emissions).

Applicable Compliance Method:

For the use of natural gas, the short term emission limitation is based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application 14-05895 submitted on November 28, 2006.

For the use of No. 2 fuel oil, the short term emission limitation is based upon the emissions unit's potential to emit and the manufacturer's guaranteed emission data as provided in PTI application 14-05895 submitted on November 28, 2006.

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- 4, and 7.

The actual annual emission rate shall be calculated by using the actual fuel usages and emission factors and methodologies specified above. The annual emissions shall be summed over the rolling 12 month period to determine compliance with the annual emissions limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) Compliance with the fuel usage limitations in c)(1) shall be demonstrated by the record keeping in d)(2).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (3) Compliance with the sulfur limitation in b)(2)e.i. shall be demonstrated by the record keeping in d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (4) Compliance with the fuel usage limitations in c)(2) and c)(3) shall be demonstrated by the record keeping in d)(2).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number P0109316 issued on 2/2/12: f)(1)-f)(4). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



2. Emissions Unit Group 1 EU's (PTI 14-5630):

EU ID	Operations, Property and/or Equipment Description
B008	25.2 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B009	25.2 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B010	25.2 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B011	12.0 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B012	12.0 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B013	12.0 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B014	33.6 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired Boiler
B015	33.6 MMBtu/hr Natural Gas/No. 2 Fuel Oil Fired 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 14-05630)	When burning natural gas: Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM10) shall not exceed 0.0076 lb/MMBtu of actual heat input. Sulfur Dioxide (SO2) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input. Nitrogen Oxides (NOx) emissions shall not exceed 0.10 lb/MMBtu of actual heat input. Carbon Monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu of actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Organic Compound (OC) emissions shall not exceed 0.011 lb/MMBtu of actual heat input.</p> <p>When burning No. 2 fuel oil:</p> <p>Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM10) shall not exceed 0.015 lb/MMBtu of actual heat input.</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.052 lb/MMBtu of actual heat input.</p> <p>Nitrogen Oxides (NO_x) emissions shall not exceed 0.15 lb/MMBtu of actual heat input.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.036 lb/MMBtu of actual heat input.</p> <p>Organic Compound (OC) emissions shall not exceed 0.004 lb/MMBtu of actual heat input.</p> <p>See b)(2)a. , b)(2)b., and c)(1) through c)(3).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), and 40 CFR Part 60 Subpart Dc.</p>
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except as specified by rule.
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

e.	40 CFR Part 60 Subpart Dc (Applicable to B014 and B015 only)	Excluding periods of startup, shutdown, or malfunction, visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.
f.	OAC rule 3745-31-13(D)(1)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The lb/MMBtu emission limitations outlined in b)(1)a, except for SO₂ when firing No. 2 fuel oil, are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these emission limits.
- b. The total annual emissions from emissions units B008 through B017 shall not exceed the following rates:
 - i. 2.04 TPY of particulate emissions (PE) and PM₁₀* ;
 - ii. 2.95 TPY of sulfur dioxide (SO₂)* ;
 - iii. 24.22 TPY of nitrogen oxides (NO_x)* ;
 - iv. 15.41 TPY of carbon monoxide (CO)* ; and
 - v. 1.98 TPY of organic compounds (OC)*.

*Compliance with the fuel quality restrictions in c)(2) and the fuel usage restrictions in c)(3) ensure ongoing compliance with the TPY emission limitation. Therefore, no annual emission calculations are required in the recordkeeping section.

- c. As a non-profit health institution, the permittee requested and received a discretionary exemption from the Director in a letter dated January 6, 2005, to exempt this emissions unit from the PSD requirements contained in OAC rules 3745-31-10 through 3745-31-20.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
 (Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))
- (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 0.052 lb/MMBtu of actual heat input and a sulfur content limit of less than or equal to 0.05 percent sulfur by weight.
 (Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (3) The maximum combined fuel usage in emissions units B008 through B017 shall not exceed 320 million cubic feet of natural gas and 800,000 gallons of No. 2 fuel oil per year.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3)).

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

- (1) 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 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 ASTM D7039 Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

(Authority for term: OAC rules 3745-31-05(A)(3), OAC 3745-18-04, and 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information on a monthly basis:
- a. the total amounts of natural gas and fuel oil burned in emissions units B008-B017, combined; and
 - b. the year-to-date total fuel oil and natural gas usage totals recorded in d)(2)a.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) For each day during which the permittee burns a fuel other than natural gas and/or No.2 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 3745-31-05(A)(3), 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05630 issued on 4/19/2005: d)(1)-d)(3). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No.2 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 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the fuel usage limitations specified in c)(3).

(Authority for term: OAC rules 3745-31-05(D)(1)(a) and 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05630 issued on 4/19/2005: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. **Emission Limitation:**

When burning natural gas:

Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM₁₀) shall not exceed 0.0076 lb /MMBtu of actual heat input.

When burning No. 2 fuel oil:

Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM₁₀) shall not exceed 0.015 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B008 through B017 shall not exceed the following rate:

2.04 TPY of PE/PM₁₀.

Applicable Compliance Methods:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs of total PM/mm cu. ft., and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 2 lbs of PM/1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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.

Compliance with the fuel content, if appropriate, and usage restrictions in c)(2) and c)(3) ensure compliance with the TPY emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitations:

When burning natural gas:

Sulfur Dioxide (SO₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Sulfur Dioxide (SO₂) emissions shall not exceed 0.052 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B008 through B017 shall not exceed the following rate:

2.95 TPY.

Applicable Compliance Methods:

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

For the use of No.2 fuel oil, the emission limitations were 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 term and condition d)(1).

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- 4, and 6.

Compliance with the fuel content and usage restrictions in c)(2) and c)(3) ensures compliance with the TPY emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

c. Emission Limitations:

When burning natural gas:

Nitrogen Oxides (NO_x) emissions shall not exceed 0.10 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Nitrogen Oxides (NO_x) emissions shall not exceed 0.15 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B008 through B017 shall not exceed the following rate:

24.22 TPY.

Applicable Compliance Methods:

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

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 20 lbs of NO_x /1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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- 4, and 7.

Compliance with the fuel content, if appropriate, and usage restrictions in c)(2) and c)(3) ensure compliance with the TPY emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

d. Emission Limitations:

When burning natural gas:

Carbon Monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Carbon Monoxide (CO) emissions shall not exceed 0.036 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B008 through B017 shall not exceed the following rate:

15.41 TPY.

Applicable Compliance Methods:

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

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 5 lbs of CO /1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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- 4, and 10.

Compliance with the fuel content, if appropriate, and usage restrictions in c)(2) and c)(3) ensure compliance with the TPY emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

e. Emission Limitations:

When burning natural gas:

Organic Compound (OC) emissions shall not exceed 0.011 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Organic Compound (OC) emissions shall not exceed 0.004 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B008 through B017 shall not exceed the following rate:

1.98 TPY.

Applicable Compliance Methods:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 11 lbs of

OC/mm cu. ft., and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 5/10) emission factor of 0.556 lb of OC/1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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- 4, and 25.

Compliance with the fuel content, if appropriate, and usage restrictions in c)(2) and c)(3) ensure compliance with the TPY emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- f. Compliance with the sulfur limitations in term and condition c)(2) shall be demonstrated by the record keeping in term and condition d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- g. Compliance with the fuel usage limitations in term and condition c)(3) shall be demonstrated by the record keeping in term and condition d)(2).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-05630 issued on 4/19/05: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.

3. Emissions Unit Group 2 EU's (PTI 14-5718):

EU ID	Operations, Property and/or Equipment Description
B018	25.86 MMBtu/hr Natural gas / No. 2 fuel oil fired boiler (Central Plant Boiler 261)
B019	25.86 MMBtu/hr Natural gas / No. 2 fuel oil fired boiler (Central Plant Boiler 262)
B020	25.86 MMBtu/hr Natural gas / No. 2 fuel oil fired boiler (Central Plant Boiler 263)
B021	25.86 MMBtu/hr Natural gas / No. 2 fuel oil fired boiler (Central Plant Boiler 264)

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 14-05718)	When burning natural gas: Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM10) shall not exceed 0.0076 lb/MMBtu of actual heat input. Sulfur Dioxide (SO ₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input. Nitrogen Oxides (NO _x) emissions shall not exceed 0.08 lb/MMBtu of actual heat input. Carbon Monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu of actual heat input. Organic Compound (OC) emissions shall not exceed 0.011 lb/MMBtu of actual heat input. When burning No. 2 fuel oil:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM10) shall not exceed 0.015 lb/MMBtu of actual heat input.</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.052 lb/MMBtu of actual heat input.</p> <p>Nitrogen Oxides (NO_x) emissions shall not exceed 0.16 lb/MMBtu of actual heat input.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.036 lb/MMBtu of actual heat input.</p> <p>Organic Compound (OC) emissions shall not exceed 0.004 lb/MMBtu of actual heat input.</p> <p>See terms and conditions b)(2)a., b)(2)b., c)(1), and c)(2).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-07(A)(1), and 40 CFR Part 60 Subpart Dc.</p>
b.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Major Modification New Source Review	<p>The maximum total annual emissions from emissions units B018 through B021 shall not exceed 39.90 TPY of nitrogen oxides (NO_x) based on a rolling 12-month summation.</p> <p>See c)(3).</p>
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 60 Subpart Dc	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The lb/MMBtu emission limitations outlined in term b)(1)a, except for SO₂ when firing No. 2 fuel oil, are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these emission limits.
- b. The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rates based on a rolling 12-month summation:
 - i. 3.74 TPY of particulate matter (PM) and PM₁₀;
 - ii. 12.97 TPY of sulfur dioxide (SO₂);
 - iii. 38.06 TPY of carbon monoxide (CO); and
 - iv. 4.98 TPY of organic compounds (OC).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
 (Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))
- (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 0.052 lb/MMBtu of actual heat input and a sulfur content limit of less than or equal to 0.05 percent sulfur by weight.
 (Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))
- (3) The maximum annual number 2 fuel oil usage in emissions units B018 through B021, combined shall not exceed 3,512,300 gallons based upon a rolling, 12-month summation of the monthly oil usage rates.
 (Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(D)).

d) Monitoring and/or Recordkeeping Requirements

(1) 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 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 ASTM D7039 Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

(Authority for term: OAC rules 3745-31-05(A)(3), OAC 3745-18-04, and 3745-77-07(C)(1))

- (2) The permittee shall maintain monthly records of the following information:
- a. the total combined amount of natural gas burned in emissions units B018 through B021, in cubic feet;
 - b. the total combined amount of No. 2 fuel oil burned in emissions units B018 through B021, in gallons;
 - c. the rolling, 12-month summation for the combined amount of natural gas burned, recorded in cubic feet, for emissions units B018 through B021;
 - d. the rolling, 12-month summation for the combined amount of No.2 fuel oil burned, recorded in gallons, for emissions units B018 through B021; and
 - e. the rolling, 12-monthly summation emissions total, in tons, for PE/PM10, SO₂, NO_x, CO, and OC when burning any combination of fuels (the total amount of emissions calculated for the current month plus the total amount of emissions for the previous eleven calendar months). The TPY emission calculations shall be performed using the emission factors found in f)(1).

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

- (3) For each day during which the permittee burns a fuel other than natural gas and/or No.2 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 3745-31-05(A)(3), 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05718 issued on 8/16/2005: d)(1)-d)(3). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No.2 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 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the fuel usage and NO_x emission limitations specified in c)(3) and b)(1)b.

(Authority for term: OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05718 issued on 8/16/2005: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

When burning natural gas:

Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM₁₀) shall not exceed 0.0076 lb /MMBtu of actual heat input.

When burning No. 2 fuel oil:

Particulate Emissions (PE) and emissions of Particulate Matter less than 10 microns (PM₁₀) shall not exceed 0.015 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rate:

3.74 TPY of PE/PM₁₀.

Applicable Compliance Methods:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs of total PM/mm cu. ft., and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 2 lbs of PM/1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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.

Compliance with the TPY emission limitation shall be demonstrated by the information collected and recorded in d)(2)e.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitations:

When burning natural gas:

Sulfur Dioxide (SO₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Sulfur Dioxide (SO₂) emissions shall not exceed 0.052 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rate:

12.97 TPY.

Applicable Compliance Methods:

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

For the use of No.2 fuel oil, the emission limitations were 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 term and condition d)(1).

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- 4, and 6.

Compliance with the TPY emission limitation shall be demonstrated by the information collected and recorded in d)(2)e.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

c. Emission Limitations:

When burning natural gas:

Nitrogen Oxides (NO_x) emissions shall not exceed 0.08 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Nitrogen Oxides (NO_x) emissions shall not exceed 0.16 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rate:

39.90 TPY.

Applicable Compliance Methods:

For the use of natural gas, the short term emission limit is based on the emission unit's potential to emit and the manufacturer's guaranteed emissions data as provided in the PTI application 14-05718 submitted April 29, 2005.

For the use of No. 2 fuel oil, the short term emission limit is based on the emission unit's potential to emit and the manufacturer's guaranteed emissions data as provided in the PTI application 14-05718 submitted April 29, 2005.

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- 4, and 7.

Compliance with the TPY emission limitation shall be demonstrated by the information collected and recorded in d)(2)e. .

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

d. Emission Limitations:

When burning natural gas:

Carbon Monoxide (CO) emissions shall not exceed 0.084 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Carbon Monoxide (CO) emissions shall not exceed 0.036 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rate:

38.06 TPY.

Applicable Compliance Methods:

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

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 5 lbs of CO /1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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- 4, and 10.

Compliance with the TPY emission limitation shall be demonstrated by the information collected and recorded in d)(2)e. .

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

e. Emission Limitations:

When burning natural gas:

Organic Compound (OC) emissions shall not exceed 0.011 lb/MMBtu of actual heat input.

When burning No. 2 fuel oil:

Organic Compound (OC) emissions shall not exceed 0.004 lb/MMBtu of actual heat input.

The maximum total annual emissions from emissions units B018 through B021 shall not exceed the following rate:

4.98 TPY.

Applicable Compliance Methods:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (mm cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 11 lbs of OC/mm cu. ft., and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the hourly oil burning capacity of the emissions unit (1000 gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 5/10) emission factor of 0.556 lb of OC/1000 gallons, and then dividing by the maximum hourly heat input of the emissions unit (MMBtu/hr).

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- 4, and 25.

Compliance with the TPY emission limitation shall be demonstrated by the information collected and recorded in d)(2)e.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- f. Compliance with the sulfur limitations in term and condition c)(2) shall be demonstrated by the record keeping in term and condition d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

- g. Compliance with the fuel usage limitations in term and condition c)(3) shall be demonstrated by the record keeping in term and condition d)(2).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-05718 issued on 8/16/2005: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

- g) Miscellaneous Requirements
 - (1) None.