



Environmental Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

2/2/2012

Certified Mail

Mr. Thomas Kinman, P.E.  
Cincinnati Children's Hospital Medical Center  
3333 Burnet Avenue  
Facilities Management, M.L.C. #8000  
Cincinnati, OH 45229-3039

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 1431071395  
Permit Number: P0109316  
Permit Type: Administrative Modification  
County: Hamilton

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

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

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

Sincerely,

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

Cc: U.S. EPA  
SWOAQA; Indiana; Kentucky





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Cincinnati Children's Hospital Medical Center**

Facility ID: 1431071395  
Permit Number: P0109316  
Permit Type: Administrative Modification  
Issued: 2/2/2012  
Effective: 2/2/2012





Division of Air Pollution Control
Permit-to-Install
for
Cincinnati Children's Hospital Medical Center

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. Federally Enforceable Standard Terms and Conditions ..... 4
2. Severability Clause ..... 4
3. General Requirements ..... 4
4. Monitoring and Related Record Keeping and Reporting Requirements ..... 5
5. Scheduled Maintenance/Malfunction Reporting ..... 6
6. Compliance Requirements ..... 6
7. Best Available Technology ..... 7
8. Air Pollution Nuisance ..... 7
9. Reporting Requirements ..... 7
10. Applicability ..... 8
11. Construction of New Sources(s) and Authorization to Install ..... 8
12. Permit-To-Operate Application ..... 9
13. Construction Compliance Certification ..... 9
14. Public Disclosure ..... 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations ..... 10
16. Fees ..... 10
17. Permit Transfers ..... 10
18. Risk Management Plans ..... 10
19. Title IV Provisions ..... 10
B. Facility-Wide Terms and Conditions ..... 11
C. Emissions Unit Terms and Conditions ..... 13
1. B022, B022 - 34 MMBtu/hr UNILUX Boiler ..... 14



## Authorization

Facility ID: 1431071395  
Facility Description: Speciality Hospital  
Application Number(s): M0001511  
Permit Number: P0109316  
Permit Description: Agency-initiated Administrative Modification to PTI 14-05895 for emission unit B022 to establish BAT and conform with the July 2, 2010, memo "Permit Processing After U.S. District Court <10 Ton/Yr Exemption Decision"  
Permit Type: Administrative Modification  
Permit Fee: \$0.00  
Issue Date: 2/2/2012  
Effective Date: 2/2/2012

This document constitutes issuance to:

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

of a Permit-to-Install for the emissions unit(s) identified on the following page.

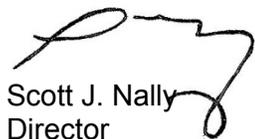
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Scott J. Nally  
Director



## **Authorization (continued)**

Permit Number: P0109316

Permit Description: Agency-initiated Administrative Modification to PTI 14-05895 for emission unit B022 to establish BAT and conform with the July 2, 2010, memo "Permit Processing After U.S. District Court <10 Ton/Yr Exemption Decision"

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>B022</b>
Company Equipment ID:	B022 - 34 MMBtu/hr UNILUX Boiler
Superseded Permit Number:	14-05895
General Permit Category and Type:	Not Applicable

## **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.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

**2. Severability Clause**

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

**3. 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 re-issuance, or modification.

- 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, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (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.
- 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, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Southwest Ohio Air Quality Agency.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Southwest Ohio Air Quality Agency. The written 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. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Southwest Ohio Air Quality Agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Southwest Ohio Air Quality Agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

## 6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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.



- c) 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 ORC section 3704.08.
  - (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.
- d) The permittee shall submit progress reports to the Southwest Ohio Air Quality 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.

**7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

**8. 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.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Southwest Ohio Air Quality Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Southwest Ohio Air Quality Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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.)

## 10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

## 11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## 12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

## 13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

## 14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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

**16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. 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.

## **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.

## **C. Emissions Unit Terms and Conditions**



1. B022, 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 2.2 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	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	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
		<p>Organic compound (OC) emissions shall not exceed 0.0054 lb/mmBtu and 0.55 TPY.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.084 lb/mmBtu and 8.57 TPY.</p> <p>Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.052 lb/mmBtu and 2.56 TPY.</p> <p>See c)(1)-c)(3) and b)(2)d.</p>
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	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 emissions 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	<p>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.</p> <p>The SO<sub>2</sub> 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).</p>
h.	OAC rule 3745-31-05(C), as effective 12/01/06	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 NOx, 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 14-05895 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 (SO<sub>2</sub>) 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/PM<sub>10</sub>, OC, CO and SO<sub>2</sub> emissions from this air contaminant source since the uncontrolled potential to emit for PE/PM<sub>10</sub>, OC, CO and SO<sub>2</sub> are less than 10 tons/yr each.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
- (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 NO<sub>x</sub> emission limitation in a)(1).
- (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 NO<sub>x</sub> emission limitation in a)(1).

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 lb/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, and the quality of the oil for those loads 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 lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)].

- c. 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 and D4294), or equivalent methods as approved by the Director.
- (2) The permittee shall maintain monthly records of the following information:
- a. the total volume of natural gas (million ft<sup>3</sup>) burned in this emissions unit;
  - b. the total number of gallons of No. 2 fuel oil used in this emissions unit for each month;
  - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the million ft<sup>3</sup> of natural gas used;
  - d. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the gallons of No. 2 fuel oil used; and
  - e. the type and total amount of fuel, other than natural gas or No. 2 fuel oil, burned in this emissions unit.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative fuel usage rates for each calendar month.

- (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:
- a. the total emissions, in tons, for NO<sub>x</sub>, when burning any combination of fuels; and
  - b. the rolling, 12-monthly summation emissions total, in tons, for NO<sub>x</sub>, 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).
- e) Reporting Requirements
- (1) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a deviation of the allowable sulfur content limitation based upon the calculated sulfur dioxide emission rates from Section A.III.1 above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

- (2) The permittee shall notify the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
  - (3) The permittee shall submit annual reports that specify the NOx emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. The CAA, Title V Fee Emission Report (FER) required to be submitted annually by April 15 for the facility will also satisfy the emission reporting requirement of this condition.
  - (4) The permittee shall submit annual reports which identify the total amount of natural gas (in million cubic feet) and No. 2 fuel oil (in gallons) combusted in emissions unit B022. These reports shall be submitted by January 31 of each year. The CAA, Title V Fee Emission Report (FER) required to be submitted annually by April 15 for the facility will also satisfy the emission reporting requirement of this condition.
  - (5) The permittee shall submit deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the following:
    - a. an identification of all exceedances of the rolling, 12-month No. 2 fuel oil usage limitation, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative fuel oil usage limitation;
    - b. an identification of all exceedances of the rolling, 12-month natural gas usage limitation, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative natural gas usage limitation; and
    - c. an identification of all exceedances of the rolling, 12-month emission limitation for NOx.
  - (6) Unless otherwise specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
- 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 9/98) 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 SO<sub>2</sub>.

Sulfur Dioxide (SO<sub>2</sub>) 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 (9/98) 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 (9/98) 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:

f. 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 1.4-1 (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 (9/98) for No. 2 fuel oil burning.

g. Emission Limitations:

0.08 lbNO<sub>x</sub>/mmBtu of actual heat input (natural gas firing);

0.16 lbNO<sub>x</sub>/mmBtu of actual heat input ( No. 2 fuel oil firing); and

8.16 TPY NO<sub>x</sub> (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 emission 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.

- (2) Compliance with the fuel usage limitations in c)(1) shall be demonstrated by the record keeping in d)(2).
  - (3) Compliance with the sulfur limitation in b)(2)f. shall be demonstrated by the record keeping in d)(1).
  - (4) Compliance with the fuel usage limitations in term and condition c)(2) shall be demonstrated by the record keeping in term and condition d)(2).
  - (5) Compliance with the fuel usage limitations in c)(3) shall be demonstrated by the record keeping in d)(2).
- g) Miscellaneous Requirements
- (1) None.