



10/3/2014

Mr. Jan-Arthur Utrecht
 University of Cincinnati
 P.O. Box 210218
 Cincinnati, OH 45221-0218

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 1431070849
 Permit Number: P0117519
 Permit Type: Initial Installation
 County: Hamilton

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	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 Ohio Environmental Protection Agency (EPA) 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. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Interim 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
University of Cincinnati**

Facility ID:	1431070849
Permit Number:	P0117519
Permit Type:	Initial Installation
Issued:	10/3/2014
Effective:	10/3/2014



Division of Air Pollution Control
Permit-to-Install
for
University of Cincinnati

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Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

Authorization

Facility ID: 1431070849
Facility Description: Central Utility and East Campus Utility Plants (CUP & ECUP)
Application Number(s): A0051593
Permit Number: P0117519
Permit Description: Initial installation of a 81.0 MMBtu/hr natural gas/fuel oil-fired temporary rental boiler for space heating.
Permit Type: Initial Installation
Permit Fee: \$200.00
Issue Date: 10/3/2014
Effective Date: 10/3/2014

This document constitutes issuance to:

University of Cincinnati
Clifton Campus
Cincinnati, OH 45221

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

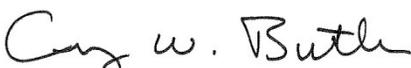
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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


Craig W. Butler
Director



Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

Authorization (continued)

Permit Number: P0117519

Permit Description: Initial installation of a 81.0 MMBtu/hr natural gas/fuel oil-fired temporary rental boiler for space heating.

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

Emissions Unit ID:	B112
Company Equipment ID:	Temporary Rental Boiler 80 MMBtu/hr
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

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) 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 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) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted



local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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.

- 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 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.
- c) 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 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) not exempt from the requirement to obtain a Permit-to-Install.

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 permittee 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 "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director 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.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- 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 operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" 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 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.



Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

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:

None.



Final Permit-to-Install
University of Cincinnati
Permit Number: P0117519
Facility ID: 1431070849
Effective Date: 10/3/2014

C. Emissions Unit Terms and Conditions



1. B112, Temporary Rental Boiler

Operations, Property and/or Equipment Description:

Initial PTI for one temporary 81.0 MMBtu/hr natural gas/fuel oil-fired rental 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.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Emissions of carbon monoxide (CO) shall not exceed 2.16 tons per month averaged over a 4-month rolling period.</p> <p>Emissions of sulfur dioxide (SO₂) shall not exceed 0.55 ton per month averaged over a 4-month rolling period.</p> <p>Emissions of volatile organic compounds (VOC) shall not exceed 0.12 ton per month averaged over a 4-month rolling period.</p> <p>Emissions of particulate emissions (PE) shall not exceed 0.58 ton per month averaged over a 4-month rolling period.*</p> <p>Emissions of particulate matter 10 microns in diameter or less (PM₁₀)/particulate matter 2.5 microns in diameter or less (PM_{2.5}) shall not exceed 0.58 ton per month averaged over a 4-month rolling period.</p> <p>*The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1).</p> <p>See b)(2)b.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 pound per million Btu of actual heat input when burning either natural gas or No. 2 fuel oil.
f.	OAC rule 3745-18-06(A)	Exempt from paragraph (D) of OAC rule 3745-18-06(D) during any calendar day in which natural gas is the only fuel burned.
g.	OAC rule 3745-18-06(D)	When burning No. 2 fuel oil, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-31-05(F)	See c)(1) through c)(5).

(2) Additional Terms and Conditions

- a. This emissions unit shall employ burners designed to achieve a NO_x emissions rate of 0.036 pound per million Btu of actual heat input when burning natural gas and 0.10 pound per million Btu of actual heat input when burning No. 2 fuel oil.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.
- c. These rule paragraphs apply 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 CO, SO₂, VOC, and PM₁₀/PM_{2.5} emissions from this



air contaminant source since the uncontrolled potential to emit for CO, SO₂, VOC, and PM₁₀/PM_{2.5} is less than 10 TPY, each.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the calculated annual emission rate for PE is less than 10 TPY taking into account the federally enforceable rule limit of 0.020 pound PE per million Btu of actual heat input when burning either natural gas or No. 2 fuel oil under OAC rule 3745-17-10(B)(1).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
- (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 0.02 pound per million Btu of actual heat input.
- (3) This emissions unit is a temporary rental boiler to provide institutional space heat during the winter season. The maximum number of operating hours for this emissions unit shall not exceed 2880, based on a rolling, 4-month summation. Since the installation constitutes the temporary placement of a rental boiler for seasonal operation only, there is no need for the additional cumulative operating hours restrictions for the first 4 months of operation.
- (4) The maximum of 2880 cumulative seasonal operating hours shall be used by March 31, 2015. On that date, this PTI shall expire.
- (5) This emissions unit shall employ low NO_x burners.

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.

- (2) The permittee shall maintain daily records of the operating hours for this emissions unit.
- (3) For the purposes of calculating actual emissions, the permittee shall also maintain daily records of the quantity and the type of fuel(s) fired during each day for this emissions unit (for natural gas, the total volume burned in millions of cubic feet; for No. 2 fuel oil, the total number of gallons used).
- (4) Upon cessation of operation of this temporary rental boiler at the facility, the permittee shall calculate the actual NO_x, SO₂, CO, VOC, PE, and PM₁₀/PM_{2.5} emissions. The emissions shall be totaled for the "operating period" from the first day of operation until the last day of operation of the rental boiler.

The emissions shall be a summation of the following calculations:

- a. the actual volume of natural gas burned in the emissions unit, in millions of cubic feet of natural gas per operating period [a summation of the daily gas volumes as recorded in d)(3)] multiplied by 1000 million Btu per million cubic feet of natural gas multiplied by the EF, in pounds of pollutant per million Btu of actual heat input divided by 2000 pounds for a total of pollutant emissions in tons per operating period; plus
- b. the actual amount of No. 2 fuel oil burned in the emissions unit, in gallons of No. 2 fuel oil per operating period [a summation of the daily oil amounts as recorded in d)(3)] multiplied by 0.1325 million Btu per gallon of No. 2 fuel oil multiplied by the EF, in pounds of pollutant per million Btu of actual heat input divided by 2000 pounds for a total of pollutant emissions in tons per operating period.

Where for each pollutant and fuel type "EF" is:

for NO_x, the Vendor Guaranteed NO_x emission rate for each fuel type;



for SO₂, the emission factor from AP-42, Fifth Ed., Table 1.4-2, 7/98 for SO₂ from natural gas combustion and the SO₂ emission rate as calculated by using the Applicable Compliance Method in f)(1)a for No. 2 fuel oil combustion;

for CO, the Vendor Guaranteed CO emission rate for each fuel type;

for VOC, the Vendor Guaranteed VOC emission rate for each fuel type;

for PE, the Vendor Guaranteed PE emission rate for each fuel type; and

for PM₁₀/PM_{2.5}, the Vendor Guaranteed PE emission rate for each fuel type assuming 100% of PE is PM₁₀/PM_{2.5}.

- c. For SO₂, CO, VOC, PE, and PM₁₀/PM_{2.5}, the permittee shall divide each pollutant's emissions total calculated in b. by four (4) to obtain each pollutant's total emissions in tons per month averaged over a 4-month rolling period.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (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.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. any exceedance of the SO₂ emission limitation, in pounds SO₂ per million Btu of actual heat input;
 - b. any exceedance of the allowable NO_x emission limitations, in pounds NO_x per million Btu of actual heat input;
 - c. any exceedance of the seasonal restriction on the hours of operation for this emissions unit; and
 - d. any exceedance of the allowable emission limitations, in tons per rolling, 4-month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (4) The permittee shall submit a final summary report that specifies the total NO_x, SO₂, CO, PE, and VOC emissions during the entire seasonal operation of this emissions unit, in tons, for each pollutant.



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:

Emissions of sulfur dioxide (SO₂) shall not exceed 0.02 pound per million Btu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method:

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

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

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

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

where:

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

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

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

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

The Applicable Emission Limitation is based on the emission factor from AP-42, Fifth Ed., Table 1.3-1, 5/10 for SO₂ from fuel oil combustion and the sulfur % and No. 2 fuel oil heat content as supplied by the permittee in PTI Application A0051593, 8/22/2014:

142(S) pounds SO₂/1000 gallons No. 2 fuel oil, where S is the weight % of sulfur in the fuel;

142(0.02) pounds SO₂/1000 gallons of No. 2 fuel oil x 1000 gallons of No. 2 fuel oil/132.5 million Btu = 0.02 pound of SO₂ per million Btu of actual heat input.

b. Emission Limitations:

Emissions of nitrogen oxides (NO_x) shall not exceed 0.036 pound per million Btu of actual heat input when burning natural gas.



Emissions of NO_x shall not exceed 0.10 pound per million Btu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method:

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

The Applicable Emission Limitations are based on the Vendor Guaranteed Emission rates as supplied by the permittee in PTI Application A0051593, 8/22/2014.

c. Emission Limitations:

Emissions of CO shall not exceed 2.16 tons per month averaged over a 4-month rolling period.

Emissions of SO₂ shall not exceed 0.55 ton per month averaged over a 4-month rolling period.

Emissions of VOC shall not exceed 0.12 ton per month averaged over a 4-month rolling period.

Emissions of PE shall not exceed 0.58 ton per month averaged over a 4-month rolling period.

Emissions of PM₁₀/PM_{2.5} shall not exceed 0.58 ton per month averaged over a 4-month rolling period.

Applicable Compliance Method:

Compliance with the monthly average CO, SO₂, VOC, PE, and PM₁₀/PM_{2.5} emission limitations shall be demonstrated by the recordkeeping in d)(4).

The Applicable Emission Limitations are based on the Vendor Guaranteed Emission rates as supplied by the permittee in PTI Application A0051593, 8/22/2014, except where noted above, and used in the following equations:

77.0 million Btu, No. 2 fuel oil/hour x 0.078 pound of CO/million Btu, No. 2 fuel oil x 2880 hours/operating period x 1 Ton/2000 pounds x operating period/4 months = 2.16 tons of CO per month averaged over a 4-month rolling period;

77.0 million Btu, No. 2 fuel oil/hour x 0.02 pound of SO₂/million Btu, No. 2 fuel oil x 2880 hours/operating period x 1 Ton/2000 pounds x operating period/4 months = 0.55 ton of SO₂ per month averaged over a 4-month rolling period;

81.0 million Btu, natural gas/hour x 0.004 pound of VOC/million Btu, natural gas x 2880 hours/operating period x 1 Ton/2000 pounds x operating period/4 months = 0.12 ton of VOC per month averaged over a 4-month rolling period;



81.0 million Btu, natural gas/hour x 0.02 pound of PE/million Btu, natural gas (SIP allowable) x 2880 hours/operating period x 1 Ton/2000 pounds x operating period/4 months = 0.58 ton of PE per month averaged over a 4-month rolling period; and

81.0 million Btu, natural gas/hour x 0.02 pound of PM₁₀/PM_{2.5}/million Btu, natural gas x 2880 hours/operating period x 1 Ton/2000 pounds x operating period/4 months = 0.58 ton of PM₁₀/PM_{2.5} per month averaged over a 4-month rolling period.

d. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

PE shall not exceed 0.020 pound per million Btu of actual heat input when burning either natural gas or No. 2 fuel oil.

Applicable Compliance Method:

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

The Applicable Emission Limitation is based on the SIP allowable in OAC rule 3745-17-10(B)(1).

g) Miscellaneous Requirements

- (1) None.