



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center  
50 W. Town St., Suite 700  
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184  
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049  
Columbus, OH 43216-1049

4/16/2009

Certified Mail

RICHARD BISHOP  
OHIO REFORMATORY FOR WOMEN  
1479 COLLINS AVE  
MARYSVILLES, OH 43040

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0180010017  
Permit Number: P0103985  
Permit Type: Initial Installation  
County: Union

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Journal Tribune. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
122 South Front Street  
Columbus, Ohio 43215

and Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA-CDO

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. **Source Description** - On October 20, 2008, Ohio Reformatory for Women submitted a PTIO application for the installation of a natural gas/No. 2 fuel oil-fired boiler (ID No. B012) for the purpose of space heat. The boiler, manufactured in 1991 and rated at 33.476, will fire primarily natural gas with fuel oil burned as a back-up and be subject to NSPS 40 CFR 60, Subpart Dc. Incidentally, this boiler was confirmed by Mr. Richard Bishop, Plant Maintenance Engineer, as being the same boiler documented in the file as a “temporary” boiler installed at the facility for approximately a year around 1992. It was included on PTI 01-3608 issued August 19, 1992 as ID No. B008 with a special term and condition stipulating that “by Dec. 1, 1992, this facility shall cease operation of Boiler No. 6 (OEPA #0180010017 B008).” The boiler ceased operation, but remained on-site and was recently relocated to the powerhouse to be added to the main operations.

This boiler has potential sulfur dioxide (SO<sub>2</sub>) emissions, when burning fuel oil, of 74.37 tons per year. When added to the potential SO<sub>2</sub> emissions from the other fuel oil burning boiler at this facility (Boiler No. B006, 37.3 million Btu per hour, included on PTI 01-3608) which has an SO<sub>2</sub> potential of 82.85 tons per year, potential SO<sub>2</sub> emissions total 157.22 tons per year. In order to avoid the applicability of Title V, the facility must limit SO<sub>2</sub> emissions to an amount less than 100 tons per year. This can be accomplished by limiting fuel oil consumption. The facility has verbally requested to limit the number of gallons of fuel oil used per year to 700,000 gallons per year. This will result in a synthetic minor potential to emit of 24.87 tons per year of SO<sub>2</sub> emissions. Note: This is the same usage limitation and associated sulfur dioxide emissions found in the general permit for boilers sized 30-34 million Btu per hour. A General Permit could not be issued in this circumstance, however, since the presence of the other fuel oil-fired boiler at the facility necessitated a synthetic minor limitation for the two sources in order to avoid the applicability of Title V. The same emissions values, associated with the 700,000 gallon limit, however, was used in this permit for consistency sake.

3. **Applicable Regulations** - The following regulations are applicable to this facility:

OAC rule 3745-17-07(A)(1) “Visible Particulate Emission Limitations for Stack Emissions” – This regulation is applicable to the boiler B012. The regulation states that “visible particulate emissions from any stack shall not exceed twenty percent opacity as a six-minute average.” Compliance with this rule is expected.

OAC rule 3745-17-10(B)(1) “Visible Particulate Emission Limitations for Stack Emissions” – This regulation is applicable and states that the maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuels, excluding blast furnace gas, and/or number two fuel oil shall be 0.020 pound per million Btu of actual heat input.

The limitation contained in this regulation is less stringent than the limitation imposed under 3745-31-05(A)(3).

### OAC rule 3745-18-06 “General Emission Limit Provisions” (SO<sub>2</sub>)

This regulation is applicable and states that SO<sub>2</sub> emissions from any oil-fired steam generating unit shall not exceed 1.6 pounds per million Btu actual heat input.

The limitation contained in this regulation is less stringent than the limitation imposed under 3745-31-05(A)(3).

### OAC rule 3745-21-08 “Control of Carbon Monoxide Emissions from Stationary Sources”

The Permittee has satisfied the “best available control techniques and operating practices” required pursuant to OAC rule 3745-21-08(B). On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B)

is no longer part of the State regulations. 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 revisions occur and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the “best available control techniques and operating practices” still exists as part of the federally-approved SIP for Ohio. A specific condition will be included in the permit stating this.

### OAC rule 3745-31-05(A)(3) “BAT”

For this source, best available technology will be considered as the use of natural gas and/or No. 2 fuel oil, the limited pollutant levels as calculated using the synthetic minor limit of 700,000 gallons per year of fuel oil, and a sulfur content limitation of 0.50 weight percent sulfur. In addition, visible emissions shall be limited to 10% opacity. These conditions are consistent with what is included in the General Permit for Boilers for a boiler between 30 and 34.9 million Btu per hour.

A condition will be included in the permit stating that compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed under this regulation.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), and 40 CFR 60, Subpart Dc.

### OAC rule 3745-31-05(D) “Special Terms and Conditions Including Federally Enforceable Limitations on Potential to Emit” -

See discussion under “Synthetic Minor Applicability.”

4. **NSPS/NESHAP/MACT/112r Applicability** – NESHAP, MACT, PSD, and 112r are not applicable to this facility. The facility is subject to NSPS, specifically 40 CFR 60, Subpart Dc since boiler B012 was manufactured after the applicability date of June 9, 1989 and has a heat input capacity between 10 and 100 million Btu per hour heat input. According to the regulation, this boiler is subject to a sulfur dioxide emission limitation of 0.50 pounds of SO<sub>2</sub> per million Btu heat input and/or a fuel oil sulfur content of 0.5 weight percent sulfur. Compliance with the sulfur emission limit or fuel oil sulfur limit can be demonstrated by keeping records of fuel oil supplier certification. In addition, because the boiler is greater than 30 million Btu per hour heat input, visible emissions are limited to 20% opacity. This opacity limitation is less stringent than that included under 3745-31-05(A). Per the regulation, the facility is required to keep records of fuel usage. As mentioned in 40 CFR 60.48c (g)(2), “as an

alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts natural gas, ... fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard,...may elect to record and maintain records of the amount of each fuel combusted during each calendar *month*.” Therefore, the usual fuel usage recordkeeping requirement contained in the permit has been relaxed from daily records to monthly.

5. **Synthetic Minor Applicability** – As stated above, this facility is synthetic minor and has chosen to take federally enforceable limits to lower facility’s potential to emit (PTE) of SO<sub>2</sub> emissions to less than 100 tons per year in order to avoid the applicability of Title V. Sulfur dioxide emissions from boilers B006 and B012 are limited to 24.87 tons per year by restricting fuel oil usage to a total for the two emissions units to 700,000 gallons per year. The facility will be required to keep monthly records of the amount of fuel oil combusted in the boilers and submit annual reports of total SO<sub>2</sub> emissions from boilers B012 and B006.
6. **Prevention of Significant Deterioration** - PSD is not applicable to this facility. This facility is considered a minor facility per PSD. Union County is in attainment.
7. **Emissions**

**Emissions from Boiler B012**

Emissions are the same as those found in the General Permit for Boilers for heat input capacities between 30 and 34.5 million Btu per hour and the fuel oil usage limitation of 700,000 gallons per year. See attached fuel oil and natural gas emissions calculations using AP-42 emission factors as well as calculations used to establish the General Permit allowable emission rates.

Pollutant	Emissions Before Controls (lb/hr)	Actual Emissions (lb/hr)	Actual Emissions (tons/yr)	Requested Allowable (lb/hr)	Requested Allowable (tons/yr)
PM	0.49	0.49	1.47	0.49	1.47
SO <sub>2</sub>	17.45	17.45	24.87	17.45	24.87
NO <sub>x</sub>	4.89	4.89	17.18	4.89	17.18
VOC	0.38	0.38	1.65	0.38	1.65
CO	2.86	2.86	12.59	2.86	12.59

8. **Total Permit Allowable Emissions Summary** (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulate emissions (PE)	1.47
PM <sub>10</sub>	1.47
SO <sub>2</sub>	24.87
NO <sub>x</sub>	17.18
CO	12.59
VOC	1.65

9. **Recommendation** – The issuance of Permit No. P0103985 is recommended.

10. Please provide additional notes or comments as necessary:

None

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
OHIO REFORMATORY FOR WOMEN

Issue Date: 4/16/2009  
Permit Number: P0103985  
Permit Type: Initial Installation  
Permit Description: one natural gas/No. 2 fuel oil-fired boiler (29.8 million Btu per hour heat input)  
Facility ID: 0180010017  
Facility Location: OHIO REFORMATORY FOR WOMEN  
1479 Collins Avenue,  
Marysville, OH 43040  
Facility Description: Motor and Generator Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Kelly Toth at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049 or (614)728-3778. The permit can be downloaded from the Web page: [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc)





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**DRAFT**

**Air Pollution Permit-to-Install and Operate  
for  
OHIO REFORMATORY FOR WOMEN**

Facility ID: 0180010017  
Permit Number: P0103985  
Permit Type: Initial Installation  
Issued: 4/16/2009  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Permit-to-Install and Operate**  
for  
**OHIO REFORMATORY FOR WOMEN**

**Table of Contents**

- Authorization ..... 1
- A. Standard Terms and Conditions ..... 3
  - 1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
  - 2. Who is responsible for complying with this permit? ..... 4
  - 3. What records must I keep under this permit? ..... 4
  - 4. What are my permit fees and when do I pay them?..... 4
  - 5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
  - 6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
  - 7. What reports must I submit under this permit? ..... 5
  - 8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? ..... 5
  - 9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?... 5
  - 10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 6
  - 11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
  - 12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
  - 13. Can I transfer this permit to a new owner or operator? ..... 6
  - 14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
  - 15. What happens if a portion of this permit is determined to be invalid? ..... 7
- B. Facility-Wide Terms and Conditions ..... 8
- C. Emissions Unit Terms and Conditions ..... 10
  - 1. B012..... 11





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

# Authorization

Facility ID: 0180010017  
Application Number(s): A0036175  
Permit Number: P0103985  
Permit Description: one natural gas/No. 2 fuel oil-fired boiler (29.8 million Btu per hour heat input)  
Permit Type: Initial Installation  
Permit Fee: \$0.00 *DO NOT send payment at this time - subject to change before final issuance*  
Issue Date: 4/16/2009  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

OHIO REFORMATORY FOR WOMEN  
1479 Collins Avenue  
Marysville, OH 43040

of a Permit-to-Install and Operate 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:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

## Authorization (continued)

Permit Number: P0103985

Permit Description: one natural gas/No. 2 fuel oil-fired boiler (29.8 million Btu per hour heat input)

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>B012</b>
Company Equipment ID:	B012
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

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



1. B012

Operations, Property and/or Equipment Description:

One natural gas/No.2 fuel oil-fired boiler (33.48 million Btu per hour maximum heat input, ID No. B012)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)e., b)(2)c., d)(1)c, and f(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu and 1.47 tons per year (TPY)</p> <p>Organic compound (OC) emissions shall not exceed 0.011 lb/mmBtu and 1.65 TPY</p> <p>Nitrogen oxide (NOx) emission shall not exceed 0.14 lb/mmBtu and 17.18 TPY</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu and 12.59 TPY</p> <p>Visible particulate emission from any stack shall not exceed 10% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-07(B), 3745-21-08(B), and 40 CFR 60, Subpart Dc.
b.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D) 40 CFR 60, Subpart Dc	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-07(B)	See b)(2)f.
d.	OAC rule 3745-21-08(B)	See b)(2)g.
e.	OAC rule 3745-31-05(D) (to avoid state modeling and Title V)	SO <sub>2</sub> emissions from emission unit B012 and B006 combined shall not exceed, as a rolling twelve month summation, 24.87 tons per year.  See b)(2)c. below.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in b)(1) above.
- b. Emission unit B006 is a natural gas/No. 2 fuel oil-fired boiler included on PTI 01-3608 issued August 19, 1992.
- c. The maximum annual No. 2 fuel oil usage rate for both this emissions unit, B012, and B006 shall not exceed 700,000 gallons total per rolling 12-month period.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the No. 2 fuel oil usage levels specified in the following table:

Month	Maximum Allowable Cumulative Usage (gallons)
1	177,000
1-2	354,000
1-3	531,000
1-4	700,000
1-5	700,000
1-6	700,000
1-7	700,000
1-8	700,000
1-9	700,000
1-10	700,000
1-11	700,000



1-12	700,000
------	---------

After the first 12 calendar months of operation, compliance with the annual No. 2 fuel oil usage limitation shall be based upon a rolling, 12-month summation of the usage rates.

- d. 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).
- e. The pounds per million Btu actual heat input and tons per year emission limitations, except for SO<sub>2</sub>, are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emissions limitations.
- f. The Permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008.

- g. The Permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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 0.50 pound per million Btu of actual heat input and



the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight percent sulfur.

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

(1) The Permittee shall maintain records of the oil burned in emissions units B006 and B012 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 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 emission 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)].

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.

c. The Permittee shall maintain monthly records of the following information:

i. the total volume of natural gas (million cubic feet) burned in emissions units B006 and B012 each month, and

ii. the total number of gallons of No. 2 fuel oil combusted in emissions units B006 and B012 each month.

e) **Reporting Requirements**

(1) Pursuant to the NSPS, the Permittee is required to report the following information at the appropriate times (if the information has not already been reported):

a. Construction date (no later than 30 days after such date),



- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date),
  - c. Actual start-up date (with-in 15 days after such date), and
  - d. Date of performance testing (if required, at least 30 days prior to testing).
- (2) Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency  
 DAPC – Permit Management Unit  
 P.O. Box 163669  
 Columbus, OH 43216-3669

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. the use of only natural gas or No. 2 fuel oil,
    - ii. the No. 2 fuel oil sulfur content limitation of no more than 0.5 weight percent sulfur, and
    - iii. the rolling 12-month No. 2 fuel oil usage limitation for emission units B012 and B006.
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

[OAC rule 3745-15-03(B)(1)(b) and OAC rule 3745-15-03(C)]

- (4) Annual Permit Evaluation forms will be mailed to the Permittee at the end of the reporting period specified in the Authorization section of this permit. The Permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance



f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) shall be determined in accordance with the following method:

a. Emissions Limitation:

10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emissions Limitation:

0.14 lb/mmBtu, 17.18 TPY NO<sub>x</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors," 5<sup>th</sup> Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO<sub>x</sub>/10<sup>3</sup> gallon emission factor into lb NO<sub>x</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hours/year and dividing by 2000 lb/ton.

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.

c. Emissions Limitation:

0.082 lb/mmBtu, 12.59 TPY CO emissions

Applicable Compliance Method

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors," 5<sup>th</sup> Edition, Section 1.4, Table 1.4-1 (7/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10<sup>6</sup> scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hours per year and dividing by 2000 lb/ton.

If required, the Permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 10.



d. Emissions Limitation

0.011 lb/mmBtu, 1.65 TPY OC emissions

Applicable Compliance Method

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors," 5<sup>th</sup> Edition, Section 1.4, Table 1.4-2 (7/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/106 scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb TOC/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hours/year and dividing by 2000 lbs/ton.

If required, the Permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 25.

e. Emission Limitation:

0.50 lb/mmBtu, 24.87 TPY SO<sub>2</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors," 5<sup>th</sup> Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the lb/mmBtu emission limitation shall be determined based on the record keeping in d)(1) and d)(3). Compliance with the annual emission limitation shall be determined by multiplying the annual average lb SO<sub>2</sub>/mmBtu value by the annual average heat content and the total gallons of No. 2 fuel oil burned, and then dividing by 2000 lbs/ton.

If required, the Permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6.

f. Emission Limitation:

0.014 lb/mmBtu, 1.47 TPY PE emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors," 5<sup>th</sup> Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10<sup>3</sup> gallons emission factor into lb PE/mmBtu by dividing by 140 mmBtu/10<sup>3</sup> gallons. Compliance with the annual emission limitation shall be demonstrated by multiplying the lb PE/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hours per year and then dividing by 2000 lbs/ton.



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.

g. Emission Limitation:

Sulfur content of the fuel oil shall be less than 0.50% by weight.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in paragraph d)(1).

(2) The permittee shall conduct, or have conducted, an initial performance test for this emissions unit (if the emissions test has not already been conducted) in accordance with the following requirements:

- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit;
- b. The emission testing shall be conducted to demonstrate compliance with the visible particulate emission limitation, while burning fuel oil.
- c. The following test method shall be employed to demonstrate compliance with the allowable emission rate: for visible particulate emissions, U.S. EPA's Reference Method 9 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA Central District Office.
- d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test notification to the appropriate Ohio EPA District Office or local air agency. The Intent to Test notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA Central District Office refusal to accept the results of the visible emissions test.

Personnel from the appropriate Ohio EPA Central District Office shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the visible emissions test (including opacity readings and the emissions unit operating parameters) shall be signed by the person(s) responsible for the test and submitted to the appropriate Ohio EPA Central District Office or local air agency within 30 days following the



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0103985

**Facility ID:** 0180010017

**Effective Date:** To be entered upon final issuance

completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.