



Environmental Protection Agency

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

10/18/2011

Rod Mamula
Atlas Roofing Corporation - Felt Plant
125 N RIVER ST
Franklin, OH 45005

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1483040158
Permit Number: P0100485
Permit Type: Renewal
County: Warren

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

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

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

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

If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: HCDOES



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Atlas Roofing Corporation - Felt Plant**

Facility ID:	1483040158
Permit Number:	P0100485
Permit Type:	Renewal
Issued:	10/18/2011
Effective:	10/18/2011
Expiration:	10/18/2016



Division of Air Pollution Control
Permit-to-Install and Operate
for
Atlas Roofing Corporation - Felt Plant

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Authorization

Facility ID: 1483040158
Application Number(s): A0032221
Permit Number: P0100485
Permit Description: Admin. Mod. to PTI 14-01036 initiated by DO/LAA and Renewal of FESOP to FEPTIO for one (1) 99 MMBtu/hr natural gas and No. 2 fuel oil-fired steam boiler for process operations with Federal Restrictions on SO₂ Potential to Emit through a No. 2 fuel oil usage limit and restrictions.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 10/18/2011
Effective Date: 10/18/2011
Expiration Date: 10/18/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Atlas Roofing Corporation - Felt Plant
125 N RIVER ST
FRANKLIN, OH 45005

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

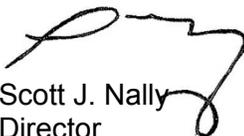
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0100485

Permit Description: Admin. Mod. to PTI 14-01036 initiated by DO/LAA and Renewal of FESOP to FEPTIO for one (1) 99 MMBtu/hr natural gas and No. 2 fuel oil-fired steam boiler for process operations with Federal Restrictions on SO2 Potential to Emit through a No. 2 fuel oil usage limit and restrictions.

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

Emissions Unit ID:	B004
Company Equipment ID:	Nebraska Boiler
Superseded Permit Number:	P0100483
General Permit Category and Type:	Not Applicable

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 Hamilton County Dept. of Environmental Services 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 submitting¹ 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 emissions 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.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

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.

B. Facility-Wide Terms and Conditions

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.

C. Emissions Unit Terms and Conditions



1. B004, Nebraska Boiler

Operations, Property and/or Equipment Description:

99 MMBtu/hr natural gas and No. 2 fuel oil fired steam boiler for process operations

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)b., d)(2)e., and e)(1).

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3), as effective 11/30/01. Emissions of sulfur dioxide (SO2) from this emissions unit shall not exceed 0.51 pound per million Btu (MMBtu) from the combustion of No. 2 fuel oil. Emissions of SO2 from this emissions unit shall not exceed 0.0006 pound per MMBtu from the combustion of natural gas. Emissions of nitrogen oxides (NOx) from this emissions unit shall not exceed 0.14 pound per MMBtu from the combustion of No. 2 fuel oil. Emissions of NOx from this emissions unit shall not exceed 0.1 pound per MMBtu from the combustion of natural gas.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.036 pound per MMBtu from the combustion of No. 2 fuel oil.</p> <p>Emissions of CO from this emissions unit shall not exceed 0.082 pound per MMBtu from the combustion of natural gas.</p> <p>Particulate emissions (PE), emissions of particulate matter 10 microns and less in diameter (PM10), and emissions of particulate matter 2.5 microns and less in diameter shall not exceed 0.020 pound per MMBtu from the combustion of either No. 2 fuel oil or natural gas. The requirements established pursuant to this rule for PE are equivalent to the requirements of OAC rule 3745-17-10(B)(1).</p> <p>Emissions of volatile organic compounds (VOC) from this emissions unit shall not exceed 0.0024 pound per MMBtu from the combustion of No. 2 fuel oil.</p> <p>Emissions of VOC from this emissions unit shall not exceed 0.0054 pound per MMBtu from the combustion of natural gas.</p> <p>See b)(2)a.</p>
b.	<p>OAC rule 3745-31-05(D), as effective 11/30/01</p> <p>Synthetic Minor to avoid Title V permitting requirements.</p>	<p>Emissions of SO₂ from this emissions unit shall not exceed 99.21 tons per year (TPY), based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.</p> <p>Emissions of NO_x from this emissions unit shall not exceed 51.22 TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.</p> <p>Emissions of CO from this emissions unit shall not exceed 26.65 TPY, based on a</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.</p> <p>Emissions of PE/PM10/PM2.5 from this emissions unit shall not exceed 8.68 TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.</p> <p>Emissions of VOC from this emissions unit shall not exceed 1.76, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.</p> <p>See b)(2)b. and b)(2)c.</p>
c.	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.
d.	OAC rule 3745-17-10(B)(1)	The maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuels and/or No. 2 fuel oil shall be 0.020 pound per MMBtu of actual heat input.
e.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-31-11 through 3745-31-20	<p>The Best Available Control Technology (BACT) determination for PE and SO2 is less stringent than the sulfur content limitation established in OAC rule 3745-31-05(D).</p> <p>See b)(2)d. and g)(1).</p>

(2) Additional Terms and Conditions

- a. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

- b. The maximum annual No. 2 fuel oil usage for this emissions unit shall not exceed 2,775,000 gallons, based upon a rolling, 12-month summation of No. 2 fuel oil usage.
 - c. 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 0.51 pound per MMBtu 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. Best Available Control Technology for the NOx emissions is the use of automatic combustion controls to maintain low excess air.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. the No. 2 fuel oil usage rate, in gallons, for each month;
 - b. the natural gas usage rate, in millions of cubic feet (MMcf), for each month;
 - c. the rolling, 12-month summation of the No. 2 fuel oil usage rates;
 - d. the rolling, 12-month summation of the natural gas usage rates; and
 - e. the rolling, 12-month summation of the SO₂, NO_x, CO, PE/PM₁₀/PM_{2.5}, and VOC emissions rates, from the combustion of No. 2 fuel oil and natural gas.
 - i. The rolling, 12-month emissions from the combustion of No. 2 fuel oil shall be calculated as follows: the rolling, 12-month summation of the No. 2 fuel oil usage rate, in gallons, as recorded in c. multiplied by 0.14 MMBtu/gallon multiplied by the emission factor for each pollutant, in pound(s)/MMBtu, and divided by 2000 pounds equaling TPY for each pollutant;
 - ii. The rolling, 12-month emissions from the combustion of natural gas shall be calculated as follows: the rolling, 12-month summation of the natural gas usage rate, in MMcf, as recorded in d. multiplied by 1020 MMBtu/MMcf multiplied by the emission factor for each pollutant, in pound(s)/MMBtu, and divided by 2000 pounds equaling TPY for each pollutant; and

- iii. The summation, for each pollutant, of the TPY emissions as calculated in i. and ii.

Emission factors for each pollutant are listed in f)(1).

- (3) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), 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.

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

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

e) Reporting Requirements

- (1) 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. all exceedances of the rolling, 12-month fuel oil usage limitation for this emissions unit;
 - ii. all exceedances of the rolling, 12-month emission limitations for this emissions unit;
 - iii. any exceedance of the allowable sulfur dioxide emission limitation, in pounds SO₂/MMBtu actual heat input; and
 - iv. any deviation from the maximum sulfur content limitation on the No. 2 fuel oil, in % by weight.
 - 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 eBusiness Center: 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).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(4) above:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
- (4) An exceedance of the visible particulate emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the permittee complies with the requirements of OAC rule 3745-15-06 and none of the conditions listed in OAC rule 3745-15-06(C) are applicable to the source.
- 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 Limitations:

Emissions of SO₂ from this emissions unit shall not exceed 0.0006 pound per MMBtu from the combustion of natural gas.

Emissions of NO_x from this emissions unit shall not exceed 0.1 pound per MMBtu from the combustion of natural gas.

Emissions of CO from this emissions unit shall not exceed 0.082 pound per MMBtu from the combustion of natural gas.

Emissions of VOC from this emissions unit shall not exceed 0.0054 pound per MMBtu from the combustion of natural gas.

Applicable Compliance Methods:

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 Method 6 for SO₂, Method 7 for NO_x, Method 10 for CO, and Method 25 for VOC. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emission limitations were established based on information in Application A0032221 for FEPTIO P0100485 and the emission factors from AP-42, Fifth Ed., Chapter 1.4, Natural Gas Combustion, 7/98, converting the units to pound per MMBtu:

0.6 lb of SO₂/MM cubic feet (cf) of natural gas (ng) x MMcf of ng/1020 MMBtu = 0.0006 pound of SO₂ per MMBtu, from natural gas combustion.

100 lbs of NO_x/MMcf of ng x MMcf of ng/1020 MMBtu = 0.1 pound of NO_x per MMBtu from natural gas combustion.

84 lbs of CO/MMcf of ng x MMcf of ng/1020 MMBtu = 0.082 pound of CO per MMBtu from natural gas combustion.

5.5 lbs of VOC/MMcf of ng x MMcf of ng/1020 MMBtu = 0.0054 pound of VOC per MMBtu from natural gas combustion.

These emission factors may be used to calculate the rolling, 12-month emissions from natural gas combustion as required in d)(2). Pursuant to OAC rule 3745-18-04(F)(4), SO₂ from natural gas shall be considered to be equal to 0.0 pound SO₂ per MMBtu.

b. Emission Limitations:

Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 0.14 pound per MMBtu from the combustion of No. 2 fuel oil.

Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.036 pound per MMBtu from the combustion of No. 2 fuel oil.

Emissions of volatile organic compounds (VOC) from this emissions unit shall not exceed 0.0024 pound per MMBtu from the combustion of 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 Method 7 for NO_x, Method 10 for CO, and Method 25 for VOC. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emission limitations were established based on information in Application A0032221 for FEPTIO P0100485 and the emission factors from AP-42, Fifth Ed., Chapter 1.3, Fuel Oil Combustion, 5/10, converting the units to pound per MMBtu:

20 lb of NO_x/thousand gallons of No. 2 x thousand gallons of No. 2/140 MMBtu = 0.14 pound of NO_x per MMBtu from No. 2 fuel combustion.

5 lbs of CO/thousand gallons of No. 2 x thousand gallons of No. 2/140 MMBtu = 0.036 pound of CO per MMBtu from No. 2 fuel combustion.

0.34 lb of VOC/thousand gallons of No. 2 x thousand gallons of No. 2/140 MMBtu = 0.0024 pound of VOC per MMBtu from No. 2 fuel combustion.

These emission factors may be used to calculate the rolling, 12-month emissions from No. 2 fuel oil combustion as required in d)(2).

c. Emission Limitations:

Particulate emissions (PE), emissions of particulate matter 10 microns and less in diameter (PM10), and emissions of particulate matter 2.5 microns and less in diameter shall not exceed 0.020 pound per MMBtu from the combustion of either No. 2 fuel oil or natural gas.

The maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuels and/or No. 2 fuel oil shall be 0.020 pound per MMBtu of actual heat input.

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, Method 5 for PE, and Method 201 for PM10. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emission limitation is the SIP allowable from OAC rule 3745-17-10(B).

Compliance with the emission limits may be demonstrated by the AP-42 emission factors, 1.9 pound per MMcf of ng (0.0019 pound per MMBtu) for natural gas and 2 pounds per thousand gallons of No. 2 fuel oil (0.014 pound per MMBtu) for No. 2 fuel oil. These emission factors may be used to calculate the rolling, 12-month emissions from No. 2 fuel oil combustion as required in d)(2).

d. Emission Limitations:

Emissions of SO₂ from this emissions unit shall not exceed 99.21 (tons per year) TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.

Emissions of NO_x from this emissions unit shall not exceed 51.22 TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.

Emissions of CO from this emissions unit shall not exceed 26.65 TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.

Emissions of PE/PM₁₀/PM_{2.5} from this emissions unit shall not exceed 8.68 TPY, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.

Emissions of VOC from this emissions unit shall not exceed 1.76, based on a rolling, 12-month summation, from the combustion of No. 2 fuel oil and natural gas.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated by the recordkeeping in d)(2).

The emission limitations were established based on information in Application A0032221 for FEPTIO P0100485 in the following calculations:

2775 thousand gallons of No. 2 fuel oil/year (yr) x 20 lbs of NO_x/thousand gallons No 2 fuel oil x 1 Ton/2000 lbs = 27.75 TPY of NO_x, from No. 2 fuel oil used.

469.35 MM cf of ng/yr x 100 lbs of NO_x/MM cf of ng x 1 Ton/2000 lbs = 23.47 TPY of NO_x, from ng used.

2775 thousand gallons No. 2 fuel oil/yr x 5 lbs of CO/thousand gallons of No. 2 fuel oil x 1 Ton/2000 lbs = 6.94 TPY of CO, from No. 2 fuel oil used.

469.35 MM cf of ng/yr x 84 lbs of CO/MM cf of ng x 1 Ton/2000 lbs = 19.71 TPY of CO, from ng used.

2775 thousand gallons of No. 2 fuel oil/yr x 140 MMBtu/thousand gallons of No. 2 fuel oil x 0.020 lb of PE/MMBtu x Ton/2000 lbs = 3.89 TPY of PE, from No. 2 fuel oil used.

469.35 MM cf of ng/yr x 1020 MMBtu/MM cf of ng x 0.020 lb of PE/MMBtu x Ton/2000 lbs = 4.79 TPY of PE, from ng used.

2775 thousand gallons of No. 2 fuel oil/yr x 140 MMBtu/thousand gallons of No. 2 fuel oil x 0.51 lb of SO₂/MMBtu x 1 Ton/2000 lbs = 99.07 TPY of SO₂, from No. 2 fuel oil used.

469.35 MM cf of ng/yr x 0.6 lb of SO₂/MM cf of ng x 1 Ton/2000 lbs = 0.14 TPY of SO₂, from ng used.

2775 thousand gallons of No. 2 fuel oil/yr x 0.34 lb of VOC (NMTOC)/thousand gallons of No. 2 fuel oil x 1 Ton/2000 lbs = 0.47 TPY of VOC (NMTOC), from No. 2 fuel oil used.

469.35 MM cf of ng/yr x 5.5 lbs of VOC/MM cf of ng x 1 Ton/2000 lbs = 1.29 TPY of VOC, from ng used.

Allowable Emissions Totals

27.75 TPY of NO_x + 23.47 TPY of NO_x = 51.22 TPY of NO_x.

6.94 TPY of CO + 19.71 TPY of CO = 26.65 TPY of CO.

3.89 TPY of PE/PM₁₀/PM_{2.5} + 4.79 TPY of PE/PM₁₀/PM_{2.5} = 8.68 TPY of PE/PM₁₀/PM_{2.5}.

99.07 TPY of SO₂ + 0.14 TPY of SO₂ = 99.21 TPY of SO₂.

0.47 TPY of VOC + 1.29 TPY of VOC = 1.76 TPY of VOC.

e. Emission Limitation:

Emissions of SO₂ from this emissions unit shall not exceed 0.51 pound per MMBtu from the combustion of 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 Method 6.

Continuous compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documentation in the supplier's analyses that the combination of sulfur content and heat content is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.51 pound per MMBtu of actual heat input.

Compliance shall be determined calculating the SO₂ emission rate in the following calculation from OAC rule 3745-18-04(F)(2):

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

Where: ER = the emission rate in lb SO₂/MMBtu;

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

D = the density of the liquid fuel in lbs/gallon; and

S = the decimal fraction of sulfur in the liquid fuel

These calculated SO₂ emission rate should be used to calculate the rolling, 12-month emissions from No. 2 fuel oil combustion as required in d)(2).

The emission limitation was established based on information in Application A0032221 for FEPTIO P0100485 (a maximum sulfur content of 0.5%, density of the liquid fuel of 7.23 lbs/gallon) and a heat content of the liquid fuel of 140,000 Btu/gallon (General Permit Template) using this calculation:

$$ER = (1 \times 10^6)/140,000 \times 7.23 \times 0.005 \times 1.974 = 0.51 \text{ lb of SO}_2/\text{MMBtu from No. 2 fuel combustion.}$$

f. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified 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.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable NOx mass emission rate when burning natural gas.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 7 through 7E.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) **Miscellaneous Requirements**

- (1) Permit number 14-01036 was a Prevention of Significant Deterioration (PSD) permitting action based upon the use of number 6 fuel oil. This permitting action is an administrative modification of permit number 14-01036 to authorize the use of number 2 fuel oil. Due to the change in emissions associated with this change in the method of operation of this emissions unit, it has been determined to retain b)(2)d. as an applicable BACT requirement.