



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

9/30/2013

Certified Mail

Nathan Wheldon
Hopedale Fractionation Facility
1515 Arapahoe Street
Suite 1600 - Tower 1
Denver, CO 80202-2137

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0634005042
Permit Number: P0114073
Permit Type: Initial Installation
County: Harrison

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Hopedale Fractionation Facility**

Facility ID:	0634005042
Permit Number:	P0114073
Permit Type:	Initial Installation
Issued:	9/30/2013
Effective:	9/30/2013
Expiration:	9/30/2023



Division of Air Pollution Control
Permit-to-Install and Operate
for
Hopedale Fractionation Facility

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Final Permit-to-Install and Operate
Hopedale Fractionation Facility
Permit Number: P0114073
Facility ID: 0634005042
Effective Date: 9/30/2013

Authorization

Facility ID: 0634005042
Application Number(s): A0047488
Permit Number: P0114073
Permit Description: Initial installation of 60,000 bpd (2.52 MMgpd) NG Fractionation Facility with VRU
Permit Type: Initial Installation
Permit Fee: \$5,700.00
Issue Date: 9/30/2013
Effective Date: 9/30/2013
Expiration Date: 9/30/2023
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Hopedale Fractionation Facility
West of Hwy 151, North of Giacobbi Rd
Green Twp., OH 43986

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

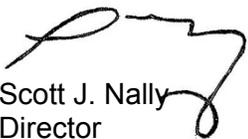
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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: P0114073
 Permit Description: Initial installation of 60,000 bpd (2.52 MMgpd) NG Fractionation Facility with VRU

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

- Emissions Unit ID: J001**
 Company Equipment ID: J001
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: J002**
 Company Equipment ID: J002
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P001**
 Company Equipment ID: P001
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P002**
 Company Equipment ID: P002
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P801**
 Company Equipment ID: P801
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: T001**
 Company Equipment ID: T001
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable

Group Name: 2 - 79.55 MMBtuNGprocess heater

Emissions Unit ID:	B001
Company Equipment ID:	B001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B002
Company Equipment ID:	B002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Hopedale Fractionation Facility
Permit Number: P0114073
Facility ID: 0634005042
Effective Date: 9/30/2013

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 Ohio EPA DAPC, Southeast 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 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.

¹ Permittees 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.



Final Permit-to-Install and Operate
Hopedale Fractionation Facility
Permit Number: P0114073
Facility ID: 0634005042
Effective Date: 9/30/2013

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) B.4.
 - 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.
2. Specific emissions units contained in this permit are subject to 40 CFR Part 60, Subparts VVa (P001, P002), Kb (T001), and OOOO (P001, P002 and P801). The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.
3. Air contaminant sources that qualify as de minimis under OAC rule 3745-15-05, or are exempt under OAC rule 3745-31-03(A)(1) or (4) are not subject to emission standards established within this permit. Although this permit does not apply to de minimis or exempt sources, emissions from de minimis or exempt sources must be included in the total potential to emit (PTE) calculations for this permit. PTE calculations should include sources such as:
 - a) Roadways and Parking Areas, F001 (de minimis per OAC rule 3745-15-05),
4. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), for this project was not necessary because for the emissions units not exempted from modeling per OEPA Engineering Guide #69, maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year when controlled. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
5. In accordance with 40 CFR 60.5365(d)(3) the pneumatic controller affected facility consists of each single continuous natural gas driven pneumatic controller.

The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subparts OOOO, including the following sections:

60.5390	Bleed rate restriction and tagging requirements
60.5410(d)(2) and (4)	Initial compliance with records and tagging.



Final Permit-to-Install and Operate
Hopedale Fractionation Facility
Permit Number: P0114073
Facility ID: 0634005042
Effective Date: 9/30/2013

C. Emissions Unit Terms and Conditions



1. J001, Truck Loading Rack

Operations, Property and/or Equipment Description:

Truck loading rack with maximum hourly throughput of 24,000 gallons (42.5 MGY) loading of propane, butane, and Y-grade product from pressurized storage tanks and natural gasoline from unpressurized storage tanks. The loading system is vented to the redundant vapor recovery system (98.7% capture/ 100% control).

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Volatile Organic Compounds (VOC) fugitive emissions shall not exceed 3.34 tons per year. See b)(2)a. and b)(2)c. through b)(2)h. below
b.	OAC rule 3745-31-05(C), as effective 12/01/06 (Voluntary restriction to avoid BAT requirements)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this



permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

This Permit to Install for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. A redundant vapor recovery system with 98.7% capture and 100% control.
 - ii. Volatile Organic Compounds (VOC)fugitive emissions shall not exceed 3.34 tons per year.
- c. For any transfer of natural gas liquids from a pressurized storage tank to a truck, the displaced vapors shall be collected by a vapor recovery system. The vapor recovery system shall be equipped with a vapor tight vapor line from the pressurized storage tanks to the truck vessels and a means to ensure that the vapor line is connected before natural gas liquids are transferred. The vapor recovery system shall be designed and operated to route at least 98.7 percent of displaced vapors from the loading process back to the pressurized storage tanks.
 - d. All natural gas liquids loading lines, unloading lines and vapor lines shall be equipped with fittings which are vapor tight.
 - e. All leaks in liquid lines and vapor lines shall be repaired within fifteen days after identification.
 - f. The delivery vessel hatches shall be closed at all times during the loading of the delivery vessel.
 - g. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
 - h. The permittee shall not permit natural gas liquids to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.



c) Operational Restrictions

- (1) The vapor recovery system shall be kept in good working order and shall be used at all times during the loading of natural gas liquids into trucks.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a log of the downtime for the vapor recovery system when this emissions unit is in operation.
- (2) While natural gas liquids are being loaded, the permittee shall monitor the vapor recovery system for leaks. If vapor leaks are detected, the permittee shall maintain a record of the following information:
 - a. the date the leak was detected;
 - b. the findings of the inspection for the leak, which shall indicate the location, nature, and severity of the leak;
 - c. the leak detection method;
 - d. the corrective action(s) taken to repair each leak and the date of final repair;
 - e. the reasons for any repair interval exceeding 15 calendar days (from the time of detection to the date of final repair) for each leak equal to or greater than one hundred per cent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10; and
 - f. the inspector's name and signature.

These records shall be retained and accessible for a period of 5 years.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Southeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) As part of the annual Permit Evaluation Report (PER), this facility shall identify the following:
 - a. each day that natural gas liquid is transferred via the loading rack and the vapor recovery system was not in operation;
 - b. each day when a leak is detected in the vapor recovery system or natural gas liquid transfer hoses other than from disconnection; and



- c. any leaks in vapor or liquid lines that are not repaired within 15 days after identification (in accordance with d)(2)).

The reports shall include the date, time, and duration of each such period.

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. Emissions Limitation:

VOC fugitive emissions shall not exceed 3.34 tons per year.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above is demonstrated by the following calculation based on the emissions factors and throughputs in the permittee's application:

VOC Emissions (tpy) = [Maximum Yearly Natural Gasoline Truck Loading (Mgal/yr) x Loading Losses EF LL2 (lb/Mgal) x (1 - Loading Collection Efficiency (%))] + [Yearly Gasoline Truck Loading (trucks/yr) x Gasoline Truck Hose Disconnect EF (lb/truck) + Yearly Pressurized Truck Loading (trucks/yr) x Pressurized Truck Hose Disconnect EF (lb/truck)] / 2,000 (lb/ton)

Where:

LL2 = 5.56 lb/Mgal

Loading Collection Efficiency 98.7 %

Yearly Gasoline Truck Loading = 42,500 Mgal/yr

Yearly Gasoline Truck Loading = 5,313 trucks/yr

Gasoline Truck Hose Disconnect EF = 0.153 lb/truck

Yearly Pressurized Truck Loading = 25,000 trucks/yr

Pressurized Truck Hose Disconnect EF = 0.112 lb/truck

If required, the permittee shall perform test(s) to determine the reduction efficiency of a vapor control system. These tests may include methods described in 40 CFR (Code of Federal Regulations) 63.11120 or an alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

g) Miscellaneous Requirements

- (1) None.



2. J002, Railcar Loading Rack

Operations, Property and/or Equipment Description:

Railcar loading rack with maximum hourly throughput of 90,000 gallons (170 MGY) loading of propane, butane, and Y-grade product from pressurized storage tanks and natural gasoline from unpressurized storage tanks. The railcar loading system is vented to a redundant vapor recovery system (98.7% capture/ 100% control).

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Volatile Organic Compounds (VOC)fugitive emissions shall not exceed 7.11 tons per year. See b)(2)a. and b)(2)c. through b)(2)h. below
b.	OAC rule 3745-31-05(C), as effective 12/01/06 (Voluntary restriction to avoid BAT requirements)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this



permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

This Permit to Install for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. A redundant vapor recovery system with 98.7% capture and 100% control.
 - ii. Volatile Organic Compounds (VOC) fugitive emissions shall not exceed 7.11 tons per year.
- c. For any transfer of natural gas liquids from a pressurized storage tank to a railcar, the displaced vapors shall be collected by a vapor recovery system. The vapor recovery system shall be equipped with a vapor tight vapor line from the pressurized storage tanks to the rail vessels and a means to ensure that the vapor line is connected before natural gas liquids are transferred. The vapor recovery system shall be designed and operated to route at least 98.7 percent of displaced vapors from the loading process back to the pressurized storage tanks.
- d. All natural gas liquids loading lines, unloading lines and vapor lines shall be equipped with fittings which are vapor tight.
- e. All leaks in liquid lines and vapor lines shall be repaired within fifteen days after identification.
- f. The delivery vessel hatches shall be closed at all times during the loading of the delivery vessel.
- g. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
- h. The permittee shall not permit natural gas liquids to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.



c) Operational Restrictions

- (1) The vapor recovery system shall be kept in good working order and shall be used at all times during the loading of natural gas liquids into railcars.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a log of the downtime for the vapor recovery system when this emissions unit is in operation.
- (2) While natural gas liquids are being loaded, the permittee shall monitor the vapor recovery system for leaks. If vapor leaks are detected, the permittee shall maintain a record of the following information:
 - a. the date the leak was detected;
 - b. the findings of the inspection for the leak, which shall indicate the location, nature, and severity of the leak;
 - c. the leak detection method;
 - d. the corrective action(s) taken to repair each leak and the date of final repair;
 - e. the reasons for any repair interval exceeding 15 calendar days (from the time of detection to the date of final repair) for each leak equal to or greater than one hundred per cent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10; and
 - f. the inspector's name and signature.

These records shall be retained and accessible for a period of 5 years.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Southeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) As part of the annual Permit Evaluation Report (PER), this facility shall identify the following:
 - a. each day that natural gas liquid is transferred via the loading rack and the vapor recovery system was not in operation;
 - b. each day when a leak is detected in the vapor recovery system or natural gas liquid transfer hoses other than from disconnection; and



- c. any leaks in vapor or liquid lines that are not repaired within 15 days after identification (in accordance with d)(2)).

The reports shall include the date, time, and duration of each such period.

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. Emissions Limitation:

VOC fugitive emissions shall not exceed 7.11 tons per year.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above is demonstrated by the following calculation based on the emissions factors and throughputs in the permittee's application:

$$\text{VOC Emissions (tpy)} = [\text{Maximum Yearly Natural Gasoline Railcar Loading (Mgal/yr)} \times \text{Loading Losses EF LL2 (lb/Mgal)} \times [1 - \text{Loading Collection Efficiency (\%)}]] + [\text{Yearly Gasoline Railcar Loading (railcars/yr)} \times \text{Gasoline Railcar Hose Disconnect EF (lb/railcar)} + \text{Yearly Pressurized Railcar Loading (railcars/yr)} \times \text{Pressurized Railcar Hose Disconnect EF (lb/railcar)}] / 2,000 \text{ (lb/ton)}$$

Where:

LL2 = 5.56 lb/Mgal

Loading Collection Efficiency 98.7 %

Yearly Gasoline Railcar Loading = 170,000 Mgal/yr

Yearly Gasoline Railcar Loading = 5,667 railcars/yr

Gasoline Railcar Hose Disconnect EF = 0.083 lb/railcar

Yearly Pressurized Railcar Loading = 25,833 railcars/yr

Pressurized Railcar Hose Disconnect EF = 0.057 lb/railcar

If required, the permittee shall perform test(s) to determine the reduction efficiency of a vapor control system. These tests may include methods described in 40 CFR (Code of Federal Regulations) 63.11120 or an alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Southeast District Office.

g) Miscellaneous Requirements

- (1) None.



3. P001, Plant and Truck Loading Emergency Flare

Operations, Property and/or Equipment Description:

Plant and truck loading air-assisted emergency flare with four natural gas pilot burners with a total maximum heat input capacity of 0.58 MMBtu/hr used to control emergency process releases from the plant and truck loading.

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Nitrogen oxide (NO _x) emissions shall not exceed 0.138lb/MMBtu and 0.35 tons per year. Carbon monoxide (CO) emissions shall not exceed 0.55lb/MMBtu and 1.40 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 0.00059 lb/MMBtu and 0.0015 ton per year. Particulate emissions (PE) shall not exceed 0.0056 lb/MMBtu and 0.0142 ton per year. Volatile organic compound (VOC)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emissions from pilot and purge gas destruction by the flare shall not exceed 0.0054 lb/MMBtu and 0.014 ton per year.</p> <p>The requirements of this rule include compliance with 40 CFR Part 60, Subparts OOOO and VVa.</p> <p>See b)(2)a. below</p>
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b. below.
c.	<p>40 CFR Part 60, Subparts A, OOOO and VVa. (40 CFR 60.18, 60.5360-5430 and 60.480a – 60.489a)</p> <p>[In accordance with 40 CFR 60.5365(f)(3), this emissions unit consists of a flare used to control emissions from pressure relief devices in a process unit in onshore natural gas located at an processing plant constructed after August 23,2011.]</p>	<p>The flare shall be designed and operated with no visible particulate emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.</p> <p>The pressure relief devices in a process unit located at an onshore natural gas processing plant are exempt from the requirements of NSPS Subpart OOOO if they are subject to and controlled according to NSPS Subpart VVa.</p> <p>See b)(2)c.-f. and c)(2) below.</p>

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, CO, VOC and PE emissions from this air



contaminant source since the calculated annual emission rate for NO_x, CO, VOC and PE is less than 10 tons/yr taking into account the federally enforceable rule limit of [no visible particulate emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.] under [40 CFR Part 60, Subparts A, OOOO and VVa].

- c. No later than 180 days after initial startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.60.482-4 and 60.482-10.
- d. Compliance with 40 CFR 60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485.
- e. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-4.
- f. Pursuant to 40 CFR 60.482-10(d), flares used to comply with 40 CFR 60.482 shall comply with the requirements of 40 CFR 60.18

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit, except during an emergency.
- (2) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 60, Subparts A ,OOOO and VVa including the following sections:

60.5365(f)(3), 60.482-10(m), 60.482-10a(b) and 60.18(e)	Operate closed vent systems and control devices used to comply with the provisions of 60.482 at all times when emissions may be vented to them.
60.5365(f)(3) and 60.482-10(g)	Repair all leaks detected for the closed vent system within 15 days with a first attempt at repair occurring within 5 days of detection except as provided by rule (e.g., delay of repair, unsafe to inspect, difficult to inspect).
60.5365(f)(3) and 60.482-10a(d) and 60.18(c)(2)	Operate the flare with a flame present at all times.
60.5365(f)(3), 60.482-10a(d), 60.18(c)(3), 60.18(c)(3)(ii), 60.18(c)(5), 60.18(e), 60.485a(g)(3), (g)(4) , and 60.18(f)(3) and (6)	Adhere to the minimum net heating value of gas specified in 60.18(c)(3)(ii) and maximum tip velocity specifications in 60.18(c)(4). Calculate heat content as specified in 60.485a(g)(4) and 60.18(f)(3). Calculate exit velocities as specified in



	60.485a(g)(3) and 60.18(f)(6).
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d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit, except during an emergency.
- (2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.5365(f)(3), 60.485a(g)(2) and 60.18(f)(2).	Monitor presence of flare pilot flame using a thermocouple or equivalent device.
60.5365(f)(3), 60.18(d)	Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
60.482-10a(e), and 60.5365(f)(3)	Monitor and operate control equipment in conformance with design.
60.482-10a(f),and 60.5365(f)(3)	Closed vent system inspection procedures and schedule.
60.486a(d)	Closed vent system and control device design requirements recordkeeping (design specifications, parametric monitoring, operating records)
60.486a(e)	Subject equipment recordkeeping requirements (equipment identification, visual inspections, instrument calibrations, connector monitoring, pressure relief device releases)

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Southeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-



Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.7(a)	Initial notification of the date construction the affected facility commenced and the actual date of the initial startup of the affected facility.
60.5365(f)(3) and 60.487(a)	Submit semiannual reports beginning six months after the initial startup date.
60.5365(f)(3) and 60.487(b) and (c)	Initial and subsequent semiannual report requirements.

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:

NO_x emissions shall not exceed 0.138lb/MMBtu and 0.35 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu limit is demonstrated based upon an emission factor of 0.138 lb/MMBtu specified in TNRCC RG-109 Table 4.

If required, NO_x emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$NO_x \text{ (ton/yr)} = NO_x \text{ emission factor (lb/MMBtu)} \times \text{pilot plus purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.138 \text{ lb/MMBtu} \times 0.58 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.35 \text{ ton per year}$$



b. Emission Limitations:

CO emissions shall not exceed 0.55 lb/MMBtu and 1.40 tons per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu limit is demonstrated based upon an emission factor of 0.55 lb/MMBtu specified in TNRCC RG-109 Table 4.

If required, CO emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{CO (ton/yr)} = \text{CO emission factor (lb/MMBtu)} \times \text{pilot plus purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.55 \text{ lb/MMBtu} \times 0.58 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 1.40 \text{ tons per year}$$

c. Emissions Limitations:

SO₂ emissions shall not exceed 0.000589 lb/MMBtu and 0.0015 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation is based upon an emission factor of 0.000589 lb/MMBtu calculated by multiplying the emission factor of 0.6 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (0.00057 MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (0.58 MMBtu/hr).

If required, the permittee shall demonstrate compliance with the SO₂ emission limitation above in accordance with test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{SO}_2 \text{ (tons/yr)} = \text{SO}_2 \text{ emission rate (lb/MMBtu)} \times \text{the maximum heat input rating of the combustion unit} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.000589 \text{ lb/MMBtu} \times 0.58 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0015 \text{ ton per year}$$



d. Emission Limitations:

PE shall not exceed 0.0056 lb/MMBtu and 0.0142 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation is based upon an emission factor of 0.0056 lb/MMBtu calculated by multiplying the emission factor of 5.7 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (0.00057 MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (0.56 MMBtu/hr).

If required, PE shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

PE (ton/yr) = PE emission factor (lb/MMBtu) X pilot/purge gas maximum heat input rate for flare (from permittee's application) X 8,760 hours of operation per year X 1 ton/2,000 lbs = 0.0056 lb/MMBtu X 0.58 MMBtu/hr X 8,760 hrs/yr X 1 ton/2,000 lbs = 0.0142 ton per year

e. Emission Limitations:

VOC emissions from pilot and purge gas destruction by the flare shall not exceed 0.0054 lb/MMBtu and 0.014 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation is based upon an emission factor of 0.0054 lb/MMBtu calculated by multiplying the emission factor of 5.5 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (0.00057 MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (0.58 MMBtu/hr).

If required, VOC emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{VOC (ton/yr)} = \text{VOC emission factor (lb/MMBtu)} \times \text{pilot/purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0054 \text{ lb/MMBtu} \times 0.58 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.014 \text{ ton per year}$$

f. Emission Limitation:

The flare shall be designed and operated with no visible particulate emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22. See f)(2).

(2) Performance testing shall be conducted as required in 40 CFR Part 60, Subparts A and OOOO pursuant to 40 CFR 60.18(f)(1), 60.5365(f)(3) and 60.485. 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 180 days after initial startup of such facility.
- b. The emissions testing shall be conducted to demonstrate compliance with the visible particulate emission limitation for the flare in accordance with the requirements of 40 CFR 60.485(g)(1).
- c. The following test method shall be employed to demonstrate compliance with the allowable emission rate for visible particulate emissions - Method 22 of 40 CFR Part 60, Appendix A.
- 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 Ohio EPA, Southeast District Office. 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. No later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s)



Final Permit-to-Install and Operate

Hopedale Fractionation Facility

Permit Number: P0114073

Facility ID: 0634005042

Effective Date: 9/30/2013

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, Southeast District Office's refusal to accept the results of the emissions test(s).

- f. Personnel from the Ohio EPA, Southeast District Office 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 Ohio EPA, Southeast District Office 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 Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

- (1) None.



4. P002, 15.2 MMBtu/hr Railroad Loading Emergency Flare

Operations, Property and/or Equipment Description:

Railcar loading air-assisted emergency flare with one natural gas pilot burner with a total maximum heat input capacity of 0.06 MMBtu/hr used to control emergency process releases from the railcar loading.

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Nitrogen oxide (NO _x) emissions shall not exceed 0.138lb/MMBtu and 0.037 tons per year. Carbon monoxide (CO) emissions shall not exceed 0.55lb/MMBtu and 0.147 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 0.0006lb/MMBtu and 0.000158 ton per year. Particulate emissions (PE) shall not exceed 0.0056 lb/MMBtu and 0.0015 ton per year. Volatile organic compound (VOC)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emissions from pilot and purge gas destruction by the flare shall not exceed 0.0055 lb/MMBtu and 0.00145 ton per year.</p> <p>The requirements of this rule include compliance with 40 CFR Part 60, Subpart OOOO.</p> <p>See b)(2)a. below</p>
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b. below.
c.	<p>40 CFR Part 60, Subparts A, OOOO and VVa. (40 CFR 60.18, 60.5360-5430 and 60.480a – 60.489a)</p> <p>[In accordance with 40 CFR 60.5365(f)(3), this emissions unit consists of a flare used to control emissions from pressure relief devices in a process unit in onshore natural gas located at an processing plant constructed after August 23,2011.]</p>	<p>The flare shall be designed and operated with no visible particulate emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.</p> <p>The pressure relief devices in a process unit located at an onshore natural gas processing plant are exempt from the requirements of NSPS Subpart OOOO if they are subject to and controlled according to NSPS Subpart VVa.</p> <p>See b)(2)c.-f. and c)(2) below.</p> <p>See c)(1), d(1) and e(3).</p>

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.



The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, CO, VOC and PE from this air contaminant source since the uncontrolled potential to emit for NO_x, CO, VOC and PE are less than 10 tons/yr.

- c. No later than 180 days after initial startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.60.482-4 and 60.482-10.
- d. Compliance with 40 CFR 60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485.
- e. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-4.
- f. Pursuant to 40 CFR 60.482-10(d), flares used to comply with 40 CFR 60.482 shall comply with the requirements of 40 CFR 60.18.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit, except during an emergency.
- (2) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 60, Subparts A ,OOOO and VVa including the following sections:

60.5365(f)(3), 60.482-10(m), 60.482-10a(b) and 60.18(e)	Operate closed vent systems and control devices used to comply with the provisions of 60.482 at all times when emissions may be vented to them.
60.5365(f)(3) and 60.482-10(g)	Repair all leaks detected for the closed vent system within 15 days with a first attempt at repair occurring within 5 days of detection except as provided by rule (e.g., delay of repair, unsafe to inspect, difficult to inspect).
60.5365(f)(3) and 60.482-10a(d) and 60.18(c)(2)	Operate the flare with a flame present at all times.
60.5365(f)(3), 60.482-10a(d), 60.18(c)(3), 60.18(c)(3)(ii), 60.18(c)(5), 60.18(e), 60.485a(g)(3), (g)(4) , and 60.18(f)(3) and (6)	Adhere to the minimum net heating value of gas specified in 60.18(c)(3)(ii) and maximum tip velocity specifications in 60.18(c)(4). Calculate heat content as specified in 60.485a(g)(4) and 60.18(f)(3). Calculate exit velocities as specified in 60.485a(g)(3) and 60.18(f)(6).



d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit, except during an emergency.
- (2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.5365(f)(3), 60.485a(g)(2) and 60.18(f)(2).	Monitor presence of flare pilot flame using a thermocouple or equivalent device.
60.5365(f)(3), 60.18(d)	Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
60.482-10a(e), and 60.5365(f)(3)	Monitor and operate control equipment in conformance with design.
60.482-10a(f),and 60.5365(f)(3)	Closed vent system inspection procedures and schedule.
60.486a(d)	Closed vent system and control device design requirements recordkeeping (design specifications, parametric monitoring, operating records)
60.486a(e)	Subject equipment recordkeeping requirements (equipment identification, visual inspections, instrument calibrations, connector monitoring, pressure relief device releases)

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Southeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.



- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.7(a)	Initial notification of the date construction the affected facility commenced and the actual date of the initial startup of the affected facility.
60.5365(f)(3) and 60.487(a)	Submit semiannual reports beginning six months after the initial startup date.
60.5365(f)(3) and 60.487(b) and (c)	Initial and subsequent semiannual report requirements.

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:

NO_x emissions shall not exceed 0.138lb/MMBtu and 0.037 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu limit is demonstrated based upon an emission factor of 0.138 lb/MMBtu specified in TNRCC RG-109 Table 4.

If required, NO_x emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$NO_x \text{ (ton/yr)} = NO_x \text{ emission factor (lb/MMBtu)} \times \text{pilot plus purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.138 \text{ lb/MMBtu} \times 0.06 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.037 \text{ ton per year}$$



b. Emission Limitations:

CO emissions shall not exceed 0.55 lb/MMBtu and 0.147 tons per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu limit is demonstrated based upon an emission factor of 0.55 lb/MMBtu specified in TNRCC RG-109 Table 4.

If required, CO emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{CO (ton/yr)} = \text{CO emission factor (lb/MMBtu)} \times \text{pilot plus purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.55 \text{ lb/MMBtu} \times 0.06 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.147 \text{ tons per year}$$

c. Emissions Limitations:

SO₂ emissions shall not exceed 0.0006 lb/MMBtu and 0.000158 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation is based upon an emission factor of 0.0006 lb/MMBtu calculated by multiplying the emission factor of 0.6 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (0.00057 MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (0.58MMBtu/hr).

If required, the permittee shall demonstrate compliance with the SO₂ emission limitation above in accordance with test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{SO}_2 \text{ (tons/yr)} = \text{SO}_2 \text{ emission rate (lb/MMBtu)} \times \text{the maximum heat input rating of the combustion unit} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0006 \text{ lb/MMBtu} \times 0.06 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.000158 \text{ ton per year}$$



d. Emission Limitations:

PE shall not exceed 0.0056 lb/MMBtu and 0.0015 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation shall be based upon an emission factor of 0.0056 lb/MMBtu calculated by multiplying the emission factor of 5.7 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (MMBtu/hr).

If required, PE shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:

$$\text{PE (ton/yr)} = \text{PE emission factor (lb/MMBtu)} \times \text{pilot/purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0056 \text{ lb/MMBtu} \times 0.06 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0015 \text{ ton per year}$$

e. Emission Limitations:

VOC emissions from pilot and purge gas destruction by the flare shall not exceed 0.0055 lb/MMBtu and 0.00145 ton per year.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation is based upon an emission factor of 0.0055 lb/MMBtu calculated by multiplying the emission factor of 5.5 lb/MMscf from AP-42 Section 1.4, Table 1.4-2 by the fuel use (0.00057 MMscf/hr, per the permittee's application) and then dividing by the units rated hourly heat input capacity (0.58 MMBtu/hr).

If required, VOC emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation is demonstrated by the following calculation:



$$\text{VOC (ton/yr)} = \text{VOC emission factor (lb/MMBtu)} \times \text{pilot/purge gas maximum heat input rate for flare (from permittee's application)} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.0055 \text{ lb/MMBtu} \times 0.06 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.00145 \text{ ton per year}$$

f. Emission Limitation:

The flare shall be designed and operated with no visible particulate emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22. See f)(2).

- (2) Performance testing shall be conducted as required in 40 CFR Part 60, Subparts A and OOOO pursuant to 40 CFR 60.18(f)(1), 60.5365(f)(3) and 60.485. 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 180 days after initial startup of such facility.
 - b. The emissions testing shall be conducted to demonstrate compliance with the visible particulate emission limitation for the flare in accordance with the requirements of 40 CFR 60.485.
 - c. The following test method shall be employed to demonstrate compliance with the allowable emission rate for visible particulate emissions - Method 22 of 40 CFR Part 60, Appendix A.
 - 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 Ohio EPA, Southeast District Office. 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. No later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. 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



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result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emissions test(s).

- f. Personnel from the Ohio EPA, Southeast District Office 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 Ohio EPA, Southeast District Office 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 Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

- (1) None.



5. P801, Fugitive Equipment Leaks

Operations, Property and/or Equipment Description:

Equipment leaks from various components, including connectors, flanges, compressors, open ended lines, pump seals, valves and other miscellaneous sources. Fugitive emissions will be minimized through a leak detection and repair program.

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. g)(1).

(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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive emissions of volatile organic compounds (VOC) shall not exceed 8.48 tons per rolling, 12-month period. See b)(2)a. below.
b.	OAC rule 3745-31-05(a)(ii), as effective 12/01/06	See b)(2)b. below.
c.	40 CFR Part 60, Subparts OOOO and VVa (40 CFR 60.5360–60.5430, 40 CFR 60.482-2a, 60.482-4a–60.482-11a) [In accordance with 40 CFR 60.5365(f), this emissions unit consists of equipment within a process unit at an onshore natural	See b)(2)c-e. below



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	gas processing plant constructed after August 23,2011.]	

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the calculated annual emission rate for VOCs is less than 10 tons/yr taking into account the federally enforceable rule limit of 8.48 tons per rolling, 12-month periodis under 40 CFR Part 60, Subparts OOOO and VV rule limits.

- c. In accordance with 40 CFR Part 60 Subparts OOOO and VVa, fugitive leaks from the following equipment are covered by this permit and subject to the NSPS requirements: valves, pump seals, connectors, flanges, open-ended lines, compressors and pressure relief devices.
- d. No later than 180 days after initial startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.482-1(a), (b) and (d) and 60.482-2 through 60.482-10, except as provided in 40 CFR 60.633.
- e. Compliance with 40 CFR 60.482–1 to 60.482–10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subparts OOOO and VVa, including the following sections:



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60.5400(a) and 60.482-2(b)(2)(ii)	Designate visual indications of liquids dripping from a pump seal as a leak, and repair the leak within 15 days of detection by eliminating visual indications of liquids dripping.
60.5400(a), 60.482-2(c)(1) and 60.5401(a)(3)(ii)	Repair detected leaks from pumps in light liquid service not later than 15 calendar days after detection, except as provided in 60.482-9a.
60.5400(a) and 60.482-2(c)(2)	Attempt first repair of detected leaks from pumps in light liquid service within 5 days after each leak is detected.
60.5400(a) and 60.482-2(d)	Meet the requirements of 60.482-2(d) for pumps equipped with a dual mechanical seal system.
60.5400(a), 60.482-2(e) and 60.486(e)	Meet the requirements of 60.482-2(e) for pumps designated for no detectable emissions (less than 500 ppm above background) in lieu of 60.482-2(a), (c) and (d).
60.5400(a), 60.482-2(g) 1) and 60.486(f)	Meet the requirements of 60.482-2(g) for pumps designated as unsafe to monitor in lieu of 60.482-2(a) and (d)(4) – (6).
60.5400(a) and 60.482-3(a)	Equip each compressor with a seal system that includes a barrier fluid system that prevents leakage of VOC to the atmosphere, except as provided in 60.482-1(c) and 60.482-3(h), (i), and (j).
60.5400(a) and 60.482-3(b) through (g)	Operate each compressor seal system and barrier fluid system in accordance with 60.482-3(b) through (g).
60.5400(a), 60.482-3(i) and 60.486(e)	Meet the requirements of 60.482-3(i) for compressors designated for no detectable emissions (less than 500 ppm above background) in lieu of 60.482-3(a) through (h).
60.5400(a), 60.482-4 and 60.5401(b)(3)	Repair detected leaks from pressure relief devices in gas/vapor service as soon as practicable, but not later than 15 calendar



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	days after detection, except as provided in 60.482-9a, and attempt first repair within 5 days after each leak is detected.*
60.5400(a) and 60.482-4(d)	Meet the requirements of 60.482-4(d)(2) for any pressure relief device equipped with a rupture disk upstream of the pressure relief device in lieu of 60.482-4(a) and (b).
60.5400(a), 60.482-5 and 60.5401(c)	Sampling connection systems are exempt from the requirements of 60.482-5.
60.5400(a) and 60.482-6(a)(1)	Equip each open-ended valve or line with a cap, blind flange, plug or a second valve, except as provided in 60.482-1(c),(d) and (e).
60.5400(a), 60.482-6(a)(2) and (b) through (e)	Operate each open-ended valve or line in compliance with the requirements of 60.482-5(a)(2) and (b) through (e).
60.5400(a), 60.482-7(d)(1) and (2)	Repair detected leaks from valves in gas/vapor or light liquid service as soon as practicable, but not later than 15 calendar days after detection, except as provided in 60.482-9, and attempt first repair within 5 days after each leak is detected.
60.5400(a) and 60.482-7(e)	Use best practices in the first attempt at repair of leaks from valves in gas/vapor or light liquid service.
60.5400(a) and 60.482-7(f)	Meet the requirements of 60.482-7(f) for valves in gas/vapor or light liquid service designated for no detectable emissions (less than 500 ppm above background) in lieu of 60.482-7(a).
60.5400(a) and 60.482-7(h)	Meet the requirements of 60.482-7(h) for valves in gas/vapor or light liquid service designated as difficult to monitor in lieu of 60.482-7(a).
60.5400(a) and 60.482-8(c)	Repair detected leaks from pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors as soon as practicable, but not later than 15 calendar days after detection, except as provided in



	60.482-9, and attempt first repair within 5 days after each leak is detected.
60.5400(a) and 60.482-8(d)	Use best practices in the first attempt at repair of leaks from pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors.
60.5400(a) and 60.482-9	Comply with the requirements in 60.482-9 for delays of repair.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subparts OOOO and VVa, including the following sections:

60.5400(a), 60.482-2(a)(1) and 60.485(b)	Monitor each pump in light liquid service within 30 days after the end of the startup period and monthly thereafter to detect leaks, except as provided in 60.482-1(f) and 60.482-2(d), (e) and (f).
60.5400(a) and 60.482-2(a)(2)	Visually inspect each pump in light liquid service each week for indications of liquids dripping from the pump seal, except as provided in 60.482-1(f).
60.5400(a) and (d), 60.482-2(b)(1) and 60.485(b)(1)	Detect leaks from pumps in light liquid service at an instrument rating of 500 ppm.
60.5400(a) and 60.482-2(b)(2)(i)	Monitor each pump in light liquid service in accordance with 60.485(b) within 5 days of discovery of liquids dripping from the pump seal.
60.5400(a) and 60.482-2(h)	Alternate inspection requirements for pumps located at unmanned plant sites.
60.5400(a), 60.482-4 and 60.5401(b)(1)	Monitor each pressure relief device in gas/vapor service quarterly and within 5 days after each pressure release to detect leaks in accordance with 60.485(c).
60.5400(a) and (d), 60.5401(b)(2), 60.482-	Detect leaks from pressure relief devices in gas/vapor service at an instrument



4 and 60.485(c)	rating of 500 ppm.
60.5400(a) and 60.482-7(a)	Monitor each valve in gas/vapor and light liquid service within 30 days after the end of the startup period and monthly thereafter to detect leaks, except as provided in 60.482-1(c) and (f), 60.483-1 and 60.483-2 and 60.482-7(f), (g) and (h).
60.5400(a), 60.5421	Perform recordkeeping requirements with respect to VOC requirements

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Southeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subparts OOOO and VVa, including the following sections:

60.7(a)	Initial notification of the date construction of the affected facility commenced and the actual date of initial startup of the affected facility
60.5400(e), and 60.487(a)	Submit semiannual reports beginning six months after the initial startup date
60.5400(e), and 60.487(b) and (c)	Initial and subsequent semiannual report requirements
60.5400(a), 60.5420	Report as required by 60.5420
60.5400(a), 60.5422	Perform reporting with respect to VOC requirements



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. Emissions Limitation:

Fugitive emissions of VOC shall not exceed 8.48 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emissions limitation shall be demonstrated by the summation of the following calculations based on the emissions factors (lb/hr/component) provided in Table 2-4 of U.S. EPA's Protocol for Equipment Leak Emission Estimates (11/95) for component types listed:

$$\text{Component Type (\# of components)} \times \text{emission factor} \times \% \text{ VOC}^* = \text{lb VOC/hr}$$

In Heavy Liquid Service

$$\text{Number of connectors (45)} \times 0.000893 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of valves (40)} \times 0.000889 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of flanges (32)} \times 0.000033 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of pump seals (4)} \times 0 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

*Where: % VOC = 95.4 per company's analysis

In Light Oil Service

$$\text{Number of connectors (359)} \times 0.199 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of valves (237)} \times 1.57 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of flanges (188)} \times 0.0547 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

$$\text{Number of pump seals (6)} \times 0.206 \text{ lb/hr} \times \% \text{ VOC} = \text{lb VOC/hr}$$

*Where: % VOC = 95.4 per company's analysis

The total summation of VOC emissions per hour shall be multiplied by 8760 hours per year and divided by 2000 pounds to calculate the rolling 12-month period fugitive VOC emissions for the demonstration of compliance.

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), for this project were not necessary because the emissions units not



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Effective Date: 9/30/2013

exempted from modeling per OEPA Engineering Guide #69, maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year when controlled. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.



6. T001, Storage Tank

Operations, Property and/or Equipment Description:

40,000 bbl (1.68 million gallon) natural gasoline storage tank controlled with redundant vapor recovery units (VRU's).

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. g)(1).

(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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compound (VOC) annual emissions from the storage tank are null. The tank emissions are controlled by redundant mechanical VRU's.</p> <p>See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(A)(a)(ii), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-21-09(L)	The requirements of this rule are less stringent than the requirements of 40 CFR Part 60, Subpart Kb.
d.	<p>40 CFR Part 60, Subpart Kb (40 CFR 60.110b – 60.117b)</p> <p>[In accordance with 40 CFR 60.110b(a), this emissions unit is a storage vessel with a capacity</p>	See b)(2)(c) and c)(1) below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	greater than or equal to 75 m ³ (19,813 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction or modification commenced after July 23, 1984.]	
e.	40 CFR Part 60 Subpart OOOO (40 CFR 60.5360–60.5430) [In accordance with 40 CFR 60.5365(e), this emissions unit is exempt from the Group 2 storage vessel affected facility designation provided that the potential for VOC emissions is less than 6 tons per year.]	Any vapor that is recovered and routed to a process through a VRU is not required to be included in the determination of VOC potential to emit for purposes of determining affected facility status provided the requirements of 60.5365 (e)(1)-(4) are met.
f.	40 CFR Part 60 Subpart A (40 CFR 60.1-19)	Table 3 of 40 CFR Part 60 Subpart OOOO shows which provisions of Subpart A apply to this emissions unit.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the calculated annual emission rate for VOC is less than 10 tons/yr taking into account the federally enforceable rule requirement to install and operate floating roof tanks under NSPS Subparts Kb, OOOO, and OAC rule 3745-21-09(L).



c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 60, Subpart Kb, including the following sections:

60.112b(a)(3)(i) and (ii)	Closed vent system and control device specifications
60.113b(c)(2)	Operate in accordance with plan

- (2) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 60, Subpart OOOO, including the following sections:

60.5365(e)(1)-(4)	VRU potential to emit exemption requirements
60.5411(b)	Cover requirements
60.5411(c)	Closed vent system requirements

- (3) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid that, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless the tank is equipped with an internal floating roof (or equivalent control approved by the Director) in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09 prior to storing a petroleum liquid with a higher vapor pressure.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a record of any period of time the fixed roof tank does not comply with the requirements of OAC rule 3745-21-09(L)(1).
- (2) The permittee shall maintain records of the following information for the fixed roof tank:
- a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

- (3) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart Kb, including the following sections:



60.115b(c)(1) and (2)	Keep records of VRU operating plan and measured values
60.116b(a)	Maintain copies of all records required by 40 CFR Part 60, Subpart Kb for a period of two years, except that records required by 60.116b(b) must be kept for the life of the storage vessel.
60.116b(b)	Maintain records showing the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
60.116b(e)	Determine the true vapor pressure using available data on storage temperature as determined pursuant to 60.116b(e)(1)-(e)(3).
60.7(b)	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure that is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence. The date that such petroleum liquid was first stored in the tank, the date removed (if removed), the total gallons throughput of each petroleum liquid exceeding this vapor pressure, and the proposed method of compliance shall be included in the report.
- (3) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Kb, including the following sections:



60.7(a) and 60.115b(a)(1)	Initial notification of the date construction of the affected facility commenced and the actual date of initial startup of the affected facility. Attach a report that describes the control equipment and certifies that the control equipment meets the specifications of 60.112b(a)(1) and 60.113b(a)(1).
60.113b(c)(1)	Operating plan for VRU

f) Testing Requirements

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

a. Emission Limitation:

VOC annual emissions from the storage tank are null.

Applicable Compliance Method:

The annual emission limitation for VOC is based upon redundant mechanical VRU rated at 100 percent control.

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), for this project were not necessary because the emissions units not exempted from modeling per OEPA Engineering Guide #69, maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year when controlled. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.



7. Emissions Unit Group - 2 - 79.55 MMBtu NGprocess heaters: B001,B002.

EU ID	Operations, Property and/or Equipment Description
B001	79.55 MMBtu/hr Broach Therminol 62 - NG Hot Oil Process Heater #1
B002	79.55 MMBtu/hr Broach Therminol 62 - NG Hot Oil Process Heater #2

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Nitrogen oxides (NO _x) emissions shall not exceed 0.045 lb/MMBtu. Carbon monoxide (CO) emissions shall not exceed 0.046 lb/MMBtu.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 0.0074 lb/MMBtu and 2.6 TPY. The requirements of this rule include compliance with OAC rule 3745-17-07(A) and 17-10(B)(1). Volatile organic compound (VOC) emissions shall not exceed 0.0054 lb/MMBtu and 1.88 TPY. Sulfur dioxide emissions (SO ₂) emissions



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		shall not exceed 0.000628 lb/MMBtu and 0.20 TPY. See b)(2)a.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.
d.	OAC rule 3745-17-07(A)	Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 lb/million BTU.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate, VOC and SO₂ emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons/yr.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.



e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

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

a. Emission Limitation:

NO_x emissions shall not exceed 0.045 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the manufacturer's guaranteed lb/MMBtu emission factor.

If required, NO_x emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emission Limitation:

CO emissions shall not exceed 0.046 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the manufacturer's guaranteed lb/MMBtu emission factor.

If required, CO emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



c. Emission Limitations:

PE shall not exceed 0.0074 lb/MMBtu and 2.6 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the AP-42 Table 1.4-2 (7/98) lb/MMBtu emission factor of 7.6 lb/MMscf.

If required, PE shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$\begin{aligned} \text{PE (tons/yr)} &= \text{PE emission factor (lb/MMBtu)} \times \text{the maximum heat input} \\ &\text{rating of the combustion unit} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \\ &\text{lbs} = 0.0074 \text{ lb/MMBtu} \times 79.55 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 2.6 \\ &\text{TPY} \end{aligned}$$

d. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

e. Emission Limitation:

VOC emissions shall not exceed 0.0054 lb/MMBtu and 1.88 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the AP-42 Table 1.4-2 (7/98) lb/MMBtu emission factor of 5.5 lb/MMscf.

If required, VOC emissions shall be demonstrated by an emission test performed in accordance with the methods and procedures specified in Methods 1 through 4 and Method 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$\begin{aligned} \text{VOC (tons/yr)} &= \text{VOC emission factor (lb/MMBtu)} \times \text{the maximum heat input} \\ &\text{rating of the combustion unit} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \\ \text{lbs} &= 0.0054 \text{ lb/MMBtu} \times 79.55 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 1.88 \\ &\text{TPY} \end{aligned}$$

f. Emission Limitation:

SO₂ emissions shall not exceed 0.000628 lb/MMBtu and 0.20 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the manufacturer's AP-42 guaranteed lb/MMBtu emission factor.

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$\begin{aligned} \text{SO}_2 \text{ (tons/yr)} &= \text{SO}_2 \text{ emission factor (lb/MMBtu)} \times \text{the maximum heat} \\ &\text{input rating of the combustion unit} \times 8,760 \text{ hours of operation per year} \times 1 \\ \text{ton}/2,000 \text{ lbs} &= 0.000628 \text{ lb/MMBtu} \times 79.55 \text{ MMBtu/hr} \times 8,760 \text{ hrs/yr} \times 1 \\ \text{ton}/2,000 \text{ lbs} &= 0.20 \text{ TPY} \end{aligned}$$

g) Miscellaneous Requirements

- (1) None.