



10/14/2014

Certified Mail

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

No	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: P0116897  
Permit Type: OAC Chapter 3745-31 Modification  
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](http://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](http://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](http://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,



Erica R. Engel-Ishida, Interim 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:	P0116897
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	10/14/2014
Effective:	10/14/2014
Expiration:	9/30/2023





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

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## Authorization

Facility ID: 0634005042  
Application Number(s): A0050855  
Permit Number: P0116897  
Permit Description: Chapter 31 Modification permit for J001 (Truck loading rack; includes truck load-out of a maximum of 85,000 Mgal of natural gasoline, a maximum of 10,625 trucks per year loaded with natural gasoline and 50,000 pressurized truck loads per year with propane, butane, and Y-grade products), J002 (Railcar loading rack; includes railcar load-out of a maximum of 400,000 Mgal of natural gasoline, a maximum of 13,333 railcars per year loaded with natural gasoline and 53,333 pressurized railcar loads per year with propane, butane, and Y-grade products), and P801 (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).  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$3,750.00  
Issue Date: 10/14/2014  
Effective Date: 10/14/2014  
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.

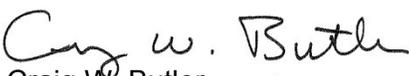
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

  
Craig W. Butler  
Director



## Authorization (continued)

**Permit Number:** P0116897  
**Permit Description:** Chapter 31 Modification permit for J001 (Truck loading rack; includes truck load-out of a maximum of 85,000 Mgal of natural gasoline, a maximum of 10,625 trucks per year loaded with natural gasoline and 50,000 pressurized truck loads per year with propane, butane, and Y-grade products), J002 (Railcar loading rack; includes railcar load-out of a maximum of 400,000 Mgal of natural gasoline, a maximum of 13,333 railcars per year loaded with natural gasoline and 53,333 pressurized railcar loads per year with propane, butane, and Y-grade products), and P801 (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).

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: P0115910  
 General Permit Category and Type: Not Applicable

**Emissions Unit ID:** J002  
 Company Equipment ID: J002  
 Superseded Permit Number: P0115910  
 General Permit Category and Type: Not Applicable

**Emissions Unit ID:** P801  
 Company Equipment ID: P801  
 Superseded Permit Number: P0114073  
 General Permit Category and Type: Not Applicable



**Final Permit-to-Install and Operate**  
Hopedale Fractionation Facility  
**Permit Number:** P0116897  
**Facility ID:** 0634005042  
**Effective Date:** 10/14/2014

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit 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 [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

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

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

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



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

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

**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:** P0116897  
**Facility ID:** 0634005042  
**Effective Date:** 10/14/2014

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



**Final Permit-to-Install and Operate**

Hopedale Fractionation Facility

**Permit Number:** P0116897

**Facility ID:** 0634005042

**Effective Date:** 10/14/2014

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, OOOO (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. Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), for this project was not necessary because the emissions units not exempted from modeling per OEPA Engineering Guides #69 and #70, 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.
4. Risk Management Plans:

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



**Final Permit-to-Install and Operate**  
Hopedale Fractionation Facility  
**Permit Number:** P0116897  
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**Effective Date:** 10/14/2014

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



**1. J001, Truck Loading**

**Operations, Property and/or Equipment Description:**

Truck loading rack controlled by a redundant vapor recovery system with a 98.7% capture and 100% control efficiency; includes truck load-out of a maximum of 85,000Mgal of natural gasoline, a maximum of 10,625 trucks per year loaded with natural gasoline and 50,000 pressurized truck loads per year with propane, butane, and Y-grade products. (Chapter 31 modification of PTIO P0115910, issued effective 1/31/2014, in order to account for increased emissions due to the installation of Plant #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.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive volatile organic compounds (VOC) emissions shall not exceed 0.56 ton per month averaged over a twelve-month rolling period.  See b)(2)a. below.
b.	OAC rule 3745-31-05(C), as effective 12/01/06	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.

Permit to Install and Operate P0116897 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. Fugitive VOC emissions shall not exceed 6.72 tons per year;
- iii. 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;
- iv. All natural gas liquids loading lines, unloading lines and vapor lines shall be equipped with fittings which are vapor tight;
- v. All leaks in liquid lines and vapor lines shall be repaired within fifteen days after identification;
- vi. The delivery vessel hatches shall be closed at all times during the loading of the delivery vessel;
- vii. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers; and



- viii. 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.
  - e) These records shall be retained and accessible for a period of 5 years.**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:

Fugitive VOC emissions shall not exceed 0.56 ton per month averaged over a twelve-month rolling period.

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:

$$[\text{Maximum Yearly Natural Gasoline Truck Loading (Mgal/yr)} \times \text{Loading Losses EF LL2 (lb/Mgal)} \times (1 - \text{Loading Collection Efficiency (\%)})] + [\text{Yearly Gasoline Truck Loading (trucks/yr)} \times \text{Gasoline Truck Hose Disconnect EF (lb/truck)} + \text{Yearly Pressurized Truck Loading (trucks/yr)} \times \text{Pressurized Truck Hose Disconnect EF (lb/truck)}] / 2,000 \text{ (lb/ton)} = \text{VOC emissions tons/yr}$$

$$(\text{VOC tons/yr}) / (12 \text{ months/yr}) = \text{VOC emissions per rolling 12-month period}$$

Where:

LL2 = 5.56 lb/Mgal

Loading Collection Efficiency 98.7 %

Yearly Gasoline Truck Loading = 85,000 Mgal/yr

Yearly Gasoline Truck Loading = 10,625 trucks/yr

Gasoline Truck Hose Disconnect EF = 0.153 lb/truck

Yearly Pressurized Truck Loading = 50,000 trucks/yr

Pressurized Truck Hose Disconnect EF = 0.112 lb/truck

Therefore:

$$[(85,000 \text{ Mgal/yr} \times 5.56 \text{ lb/Mgal}) \times (1 - 0.987)] + (10,625 \text{ trucks/yr} \times 0.153 \text{ lb/truck}) + (50,000 \text{ trucks/yr} \times 0.112 \text{ lb/railcar}] / 2,000 \text{ lb/ton} = 6.68 \text{ tons/yr VOC emissions}$$

$$(6.68 \text{ tons/yr}) / (12 \text{ months/yr}) = 0.56 \text{ tons VOC emissions per rolling 12-month period}$$



**Final Permit-to-Install and Operate**

Hopedale Fractionation Facility

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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**

**Operations, Property and/or Equipment Description:**

Railcar loading rackcontrolled by a redundant vapor recovery system with a 98.7% capture and 100% control efficiency; includes railcar load-out of a maximum of 400,000 Mgal of natural gasoline, a maximum of 13,333 railcars per year loaded with natural gasoline and 53,333 pressurized railcar loads per year with propane, butane, and Y-grade products. (Chapter 31 modification of PTIO P0115910, issued effective 1/31/2014,in order to account for increased emissions due to the installation of Plant #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) and OAC rule 3745-31-05(A)(3)	Fugitive volatile organic compounds (VOC)emissions shall not exceed 1.38 tons per month averaged over a twelve-month rolling period.  See b)(2)a. through b)(2)f. below.

(2) Additional Terms and Conditions

a. 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



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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.

- b. All natural gas liquids loading lines, unloading lines and vapor lines shall be equipped with fittings which are vapor tight.
- c. All leaks in liquid lines and vapor lines shall be repaired within fifteen days after identification.
- d. The delivery vessel hatches shall be closed at all times during the loading of the delivery vessel.
- e. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
- f. 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:

Fugitive VOC emissions shall not exceed 1.38 tons per month averaged over a twelve-month rolling period.

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:

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

$$(\text{VOC Emissions tons/yr}) / (12 \text{ months/year}) = \text{VOC emissions per rolling 12-month period}$$



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Where:

LL2 = 5.56 lb/Mgal

Loading Collection Efficiency 98.7 %

Yearly Natural Gasoline Railcar Loading = 400,000 Mgal/yr

Yearly Natural Gasoline Railcar Loading = 13,333 railcars/yr

Gasoline Railcar Hose Disconnect EF = 0.083 lb/railcar

Yearly Pressurized Railcar Loading = 53,333 railcars/yr

Pressurized Railcar Hose Disconnect EF = 0.057 lb/railcar

Therefore:

$$[(400,000 \text{ Mgal/yr} \times 5.56 \text{ lb/Mgal}) \times (1 - 0.987) + (13,333 \text{ railcars/yr} \times 0.083 \text{ lb/railcar}) + (53,333 \text{ railcars/yr} \times 0.057 \text{ lb/railcar})] / 2,000 \text{ lb/ton} = 16.53 \text{ tons/yr VOC emissions}$$

$$(16.53 \text{ tons/yr}) / (12 \text{ months/yr}) = 1.38 \text{ tons VOC emissions per rolling 12-month period}$$

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. P801, 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. (Chapter 31 modification of PTIO P0114073, issued effective 9/30/2013, in order to account for increased emissions due to the installation of Plant #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) and OAC rule 3745-31-05(A)(3)	Fugitive volatile organic compounds (VOC) emissions shall not exceed 1.34 tons per month averaged over a twelve-month rolling period.
b.	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	See b)(2)a-c. below



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	process unit at an onshore natural gas processing plant constructed after August 23,2011.]	

(2) Additional Terms and Conditions

- a. 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.
- b. 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.
- c. 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:

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



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	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 40.482-3(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 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
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	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), 60.482-4 and 60.485(c)	Detect leaks from pressure relief devices in gas/vapor service at an instrument 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 VOC emissions shall not exceed 1.34 tons per month averaged over a twelve-month rolling 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:

Component type (# of components) x emission factor kg/hr/component x 2.20462 lb/kg conversion factor = Average Leak Rate lb/hr

Average Leak Rate lb/hr x 1.20 (20% to establish maximum leak rate) = Maximum Leak Rate lb/hr

[Maximum Leak Rate lb/hr x 8,760 hrs/yr] / 2,000 lbs/ton = Maximum Leak Rate tons/yr



Maximum Leak Rate (tons/yr) / 12 months/yr = tons of VOC emissions per month averaged over a twelve-month rolling period.

**In Heavy Liquid Service**

**Connectors:**

Number of connectors (90) x 0.0000075 kg/hr/component x 2.20462 lb/kg = 0.0014881185 average leak rate lb/hr VOC

0.0014881185lb/hr x 1.20 = 0.0017857422 maximum leak rate lb/hr VOC

(0.0017857422lb/hr x 8,760hrs/yr) / 2,000 lbs/ton = 0.00782155083 tons/yr

(0.00782155083 tons/yr) / 12 months/yr = 0.0006517959 tons of VOC emissions per month averaged over a twelve-month rolling period

**Valves:**

Number of valves (80) x 0.0000084 kg/hr/component x 2.20462 lb/kg = 0.00148150464 average leak rate lb/hr VOC

0.00148150464lb/hr x 1.20 = 0.00177780556 maximum leak rate lb/hr VOC

(0.00177780556lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 0.00778678838 tons/yr

(0.00778678838tons/yr) / 12 months/yr = 0.00064889903 tons of VOC emissions per month averaged over a twelve-month rolling period

**Flanges:**

Number of flanges (64) x 0.00000039 kg/hr/component x 2.20462 lb/kg = 0.00005502731 average leak rate lb/hr VOC

0.00005502731lb/hr x 1.20 = 0.00006603277 maximum leak rate lb/hr VOC

(0.00006603277lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 0.00028922354 tons/yr

(0.00028922354 tons/yr) / 12 months/yr = 0.00002410196 tons of VOC emissions per month averaged over a twelve-month rolling period

**Pump Seals:**

Number of pump seals (8) x 0.00 kg/hr/component x 2.20462 lb/kg = 0.00 average leak rate lb/hr VOC

0.00 lb/hr x 1.20 = 0.00 maximum leak rate lb/hr VOC

(0.00 lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 0.00 tons/yr

(0.00 tons/yr) / 12 months/yr = 0.00 tons of VOC emissions per month averaged over a twelve-month rolling period



**In Light Oil Service**

**Connectors:**

Number of connectors (718) x 0.00021 kg/hr/component x 2.20462 lb/kg = 0.3324126036 average leak rate lb/hr VOC

0.3324126036lb/hr x 1.20 = 0.39889512432 maximum leak rate lb/hr VOC

(0.39889512432lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 1.74716064452 tons/yr

(1.74716064452 tons/yr) / 12 months/yr = 0.14559672037 tons of VOC emissions per month averaged over a twelve-month rolling period

**Valves:**

Number of valves (474) x 0.0025 kg/hr/component x 2.20462 lb/kg = 2.6124747 average leak rate lb/hr VOC

2.6124747lb/hr x 1.20 = 3.13496964 maximum leak rate lb/hr VOC

(3.13496964lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 13.731670232 tons/yr

(13.731670232 tons/yr) / 12 months/yr = 1.1442639186 tons of VOC emissions per month averaged over a twelve-month rolling period

**Flanges:**

Number of flanges (376) x 0.00011 kg/hr/component x 2.20462 lb/kg = 0.0911830832 average leak rate lb/hr VOC

0.0911830832lb/hr x 1.20 = 0.10941969984 maximum leak rate lb/hr VOC

(0.10941969984lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 0.47925828529 tons/yr

(0.47925828529 tons/yr) / 12 months/yr = 0.03993819044 tons of VOC emissions per month averaged over a twelve-month rolling period

**Pump Seals:**

Number of pump seals (12) x 0.00 kg/hr/component x 2.20462 lb/kg = 0.00 average leak rate lb/hr VOC

0.00 lb/hr x 1.20 = 0.00 maximum leak rate lb/hr VOC

(0.00 lb/hr x 8,760 hrs/yr) / 2,000 lbs/ton = 0.00 tons/yr

(0.00 tons/yr) / 12 months/yr = 0.00 tons of VOC emissions per month averaged over a twelve-month rolling period



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**Therefore:**

0.0006517959 tons/month + 0.00064889903 tons/month + 0.00002410196 tons/month + 0.00 tons/month + 0.14559672037 tons/month + 1.1442639186 tons/month + 0.03993819044 tons/month + 0.00 tons/month = **1.34 tons per month averaged over a twelve-month rolling period**

g) Miscellaneous Requirements

(1) None.