



11/13/2014

Certified Mail

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

Mr. James Roberts
Harrison Hub Fractionation Plant
10 East Main Street
Salineville, OH 43945

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0634005028
Permit Number: P0117878
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

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,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Harrison Hub Fractionation Plant**

Facility ID:	0634005028
Permit Number:	P0117878
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	11/13/2014
Effective:	11/13/2014
Expiration:	1/16/2023



Division of Air Pollution Control
Permit-to-Install and Operate
for
Harrison Hub Fractionation Plant

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Final Permit-to-Install and Operate
Harrison Hub Fractionation Plant
Permit Number: P0117878
Facility ID: 0634005028
Effective Date: 11/13/2014

Authorization

Facility ID: 0634005028
Application Number(s): A0049667
Permit Number: P0117878
Permit Description: Chapter 31 modification to increase throughput to the flare, P003, and increase fugitive emissions, P801.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$400.00
Issue Date: 11/13/2014
Effective Date: 11/13/2014
Expiration Date: 1/16/2023
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Harrison Hub Fractionation Plant
37905 Crimm Rd.
Scio, OH 43988

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

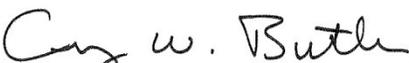
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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



Final Permit-to-Install and Operate
Harrison Hub Fractionation Plant
Permit Number: P0117878
Facility ID: 0634005028
Effective Date: 11/13/2014

Authorization (continued)

Permit Number: P0117878
Permit Description: Chapter 31 modification to increase throughput to the flare, P003, and increase fugitive emissions, P801.

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

Emissions Unit ID:	P003
Company Equipment ID:	Plant Flare
Superseded Permit Number:	P0110476
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P801
Company Equipment ID:	Fugitives
Superseded Permit Number:	P0110476
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Harrison Hub Fractionation Plant
Permit Number: P0117878
Facility ID: 0634005028
Effective Date: 11/13/2014

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
Harrison Hub Fractionation Plant
Permit Number: P0117878
Facility ID: 0634005028
Effective Date: 11/13/2014

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.3.
 - 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. Emissions unit P003, contained in this permit, and emissions units T007, located at this facility (as identified in P0117446), are subject to 40 CFR Part 60, Subpart OOOO. Emissions unit P801, contained in this permit, is subject to 40 CFR Part 60, Subpart OOOO and portions of 40 CFR Part 60, Subpart VVa. Emissions units T001, T002, T003, T004, T005 and T006, located at this facility (as identified in P0110476), are subject to 40 CFR Part 60, Subpart Kb. Emissions unit B001, located at this facility (as identified in P0110476), is subject to 40 CFR Part 60, Subpart Db. 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" in ORC 3704.03(F)(4)(b) was not necessary for this project, even though the maximum annual emission rate for hexane, an air toxic air contaminant as defined in OAC rule 3745-114-01, will be greater than 1.0 ton per year (3.179 tons per year). The majority of the hexane (1.807 tons per year) is emitted from J001, Natural gas loading rack controlled by a flare (as identified in P0117446), and those emissions do not need to be considered pursuant to DAPC's Engineering Guide 70, Question 11. The remaining hexane emissions from this project are less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install and operate 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 material, 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 permit to install and operate.
4. If applicable, the permittee shall 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") no later than the date on which a regulated substance is first present above a threshold quantity in a process.
5. 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) Controlled Blowdown Emissions/Loading Area (de minimis per OAC rule 3745-15-05);
 - b) Closed and Cold Drain Systems, P002 (de minimis per OAC rule 3745-15-05);



Final Permit-to-Install and Operate

Harrison Hub Fractionation Plant

Permit Number: P0117878

Facility ID: 0634005028

Effective Date: 11/13/2014

- c) Emergency Fire Pump Engine, P001 (Permit-by-rule – PBR ID PBR09942);
- d) Process wastewater tanks, (de minimis per OAC rule 3745-15-05); and
- e) Pressurized propane and butane storage tanks (de minimis per OAC rule 3745-15-05 and exempt per OAC rule 3745-31-03(A)(1)(I)).
- f) 150 kW emergency generator for the LPG flare blower (permit exempt per OAC rule 3745-31-03(pp))



Final Permit-to-Install and Operate
Harrison Hub Fractionation Plant
Permit Number: P0117878
Facility ID: 0634005028
Effective Date: 11/13/2014

C. Emissions Unit Terms and Conditions



1. P003, Flare for the control of emergency releases

Operations, Property and/or Equipment Description:

Emergency Release Control Flare – The flare is used to control potential VOC emissions from the closed and cold drain system, plus any emergency venting that could occur during a process upset. The flare has a maximum capacity of 8,029 MMBtu/hr.(Chapter 31 modification of P0110476 issued 1/16/2013, to increase pilot gas flow, purge gas flow, increase process venting to flare, increase closed and cold drain emissions (de minimis unit), increase the continuous compressor and continuous process analyzer flow, increase the hose blowdown from railcar loading of propane and butane to account for the installation of Fractionation Train #3. Hose blowdown emissions from railcar loading of propane and butane were re-routed from the Storage/Loading Flare to P003.)

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 12/20/2013	Nitrogen oxides (NO _x) emissions shall not exceed 0.06 ton per month as a rolling, 12-month average. Carbon monoxide (CO) emissions shall not exceed 0.34 ton per month as a rolling, 12-month average. Particulate emissions (PE) shall not exceed 0.007 ton per month as a rolling, 12-month average.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions from the pilot and purge gas going to the flare shall not exceed 0.11 ton per month as a rolling, 12-month average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 02/20/2013	See b)(2)b.
c.	40 CFR Part 60, Subparts A and OOOO. (40 CFR 60.18, 60.5360-5430) [In accordance with 40 CFR 60.5412(a), this emissions unit consists of a flare and closed vent system used to control emissions from storage vessels in the oil and natural gas production segment.]	See c)(1), d(1), e(3), f(1)e., and f)(2).

(2) Additional Terms and Conditions

- a. This Best Available Control (BAT) emissions limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These rule paragraphs apply once U.S. EPA approves OAC rule 3745-31-05(A)(3)(a) (the less than 10 tons per year BAT exemption) into the Ohio SIP.

 The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx, CO, PE, or VOC emissions from this air contaminant source since the potential to emit for NOx, CO, PE and VOC is less than 10 tons/yr.
- c. The emissions limitations established for this emissions unit do not include emissions that would result from upset/emergency situations. The emissions resulting from upset/emergency conditions would be reported in accordance with OAC rule 3745-15-06.

c) Operational Restrictions

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



60.5395(a), 60.5410(e)(3), 60.5415(e)(1)	Operate the flare to achieve at least a 95% reduction of emissions of VOC from the storage vessels.
60.5395(b), 60.5410(e)(4), and 60.5411(b)	Equip the storage tanks with a cover connected through a closed vent system to the flare. The cover and all openings in the cover must form a continuous barrier over the entire surface area of the liquid in the storage vessel and must be secured in a closed, sealed position whenever material is stored in the storage vessels except as provided by rule.
60.5411(a)(1), 60.5412(b)(1), and 60.18(e)	Operate closed vent systems and control devices used to comply with the provisions of 60.5395 at all times when emissions may be vented to them.
60.5411(a)(2)	Design and operate the closed vent system with no detectable emissions as demonstrated by § 60.5416(b).
60.5411(a)(3)	Any valves associated with the closed vent system that are capable of diverting all or a portion of the emissions away from the flare must be equipped with bypass flow monitors or must be secured in the non-diverting position using a car-seal or a lock-and-key type configuration. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to this requirement.
60.5416(b)(9), (10), (11), (12)	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).
60.5412(a)(3) and 60.18(c)(1)	Design and operate the flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
60.5412(a)(3) and 60.18(c)(2)	Operate the flare with a flame present at all times.
60.5412(a)(3), 60.18(c)(3), 60.18(c)(3)(i), 60.18(f)(4) and (5)	Adhere to the diameter, hydrogen content, and exit velocity specifications in 60.18(c)(3)(i)(A). Calculate exit velocities as specified in 60.18(f)(4) and (5).*
60.5412(a)(3), 60.18(c)(3), 60.18(c)(3)(ii), 60.18(c)(4), 60.18(f)(3), (4), and (5)	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 60.18(f)(3). Calculate exit velocities as specified in 60.18(f)(4) and (5).*



* The permittee may choose to comply with any alternative standards provided in 40 CFR Part 60, Subparts A and OOOO.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subparts A and OOOO, including the following sections:

60.5417(d)(1)(iii) and 60.5415(e)(2)(vii)(B).	Install, calibrate, operate, and maintain a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.
60.5417(c)(1)	Detect and record the presence of a flare flame at least once every hour.
60.5417(c)(2), 60.18(d), 60.18(f)(2)	Install, calibrate, operate, and maintain the heat sensing monitoring device in accordance with a site specific monitoring plan including the information required by rule.
60.5417(c)(3) and (4)	Conduct a continuous parameter monitoring system equipment performance check, system accuracy audit, or other audit procedure as specified in the site-specific monitoring plan at least once every 12 months. Conduct performance evaluations of the continuous parameter monitoring systems as specified in the site-specific monitoring plan.
60.5416(a)(1)	Conduct an initial inspection of all closed vent system joints, seams, or other connections that are permanently or semi-permanently sealed to demonstrate that the system operates with no detectable emissions. Conduct subsequent annual visual inspections for defects. Any defective components that are replaced must be inspected to demonstrate that these components operate with no detectable emissions.
60.5416(a)(2)	Conduct initial and annual inspections of all closed vent system components other than those described under 60.5416(a)(1) to demonstrate that that system operates with no detectable emissions. Also conduct annual visual inspections for defects.
60.5416(a)(3)	Conduct initial and annual inspections of the storage vessel covers to identify any defects.
60.5416(a)(4)	Except for low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices,



	operate the bypass valve flow monitors to collect a reading at least once every 15 minutes or visually inspect all bypass valves secured in the non-diverting position at least monthly to verify that valve remains in the non-diverting position.
60.5416(b)(1) through (8)	Conduct inspections of closed vent systems to detect leaks according to USEPA Method 21 and as provided by rule. The condition of no detectable emissions is defined as an organic concentration value less than 500 ppmv.
60.5420(c)(5)	Maintain required records for storage vessels.
60.5420(c)(6)	Maintain required records for inspections of closed vent systems.
60.5420(c)(7)	Maintain required records for inspections of storage vessel covers.
60.5420(c)(8)	Maintain required records for inspections of bypass valves.
60.5420(c)(9)	Maintain required records for leaks and repairs of closed vent systems.
60.5420(c)(11)	Maintain required records for continuous parameter monitoring systems.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.
- (3) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts OOOO and A, including the following sections:

60.5420(a)(1)	Initial notifications are not required for storage vessels.
60.5410(e)(8),	Submit the required information for storage vessels in



60.5420(b)(1), and 60.5420(b)(6)	the initial annual report within 30 days of the end of the initial compliance period and in the subsequent reports due the same date each year as the initial annual report.
60.5420(b)(7)	Submit the results of performance testing to USEPA's WebFIRE database within 60 days of completing each performance test.

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:

NO_x emissions shall not exceed 0.06 ton per month as a rolling, 12-month average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following calculation:

NO_x (ton/yr) = [(NO_x emission factor for pilot (73.07 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (100% - from permittee's application) X Maximum natural gas usage for pilot (0.000234 MMscf/hr - from permittee's application))

+ (NO_x emission factor for purge gas (73.07 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (98% - from permittee's application) X Maximum natural gas usage for purge gas (0.002160 MMscf/hr – from permittee's application))] X 8,760 hours of operation per year X 1 ton/2,000 lbs X 1 year/12 months

= [(0.0171 lbs/hr from pilot) + (0.155 lb/hr from purge gas) X 8,760 hrs/yr X 1 ton/2,000 lbs X 1 year/12 months

= 0.06 ton per month, as a rolling, 12-month summation

b. Emissions Limitation:

CO emissions shall not exceed 0.34 ton per month as a rolling, 12-month average.



Applicable Compliance Method:

Compliance shall be demonstrated based upon the following calculation:

CO (ton/yr) = [(CO emission factor for pilot (397.60 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (100% - from permittee's application) X Maximum natural gas usage for pilot (0.000234 MMscf/hr - from permittee's application))

+ (CO emission factor for purge gas (397.6 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (98% - from permittee's application) X Maximum natural gas usage for purge gas (0.002160 MMscf/hr – from permittee's application))]

X 8,760 hours of operation per year X 1 ton/2,000 lbs X 1 year/12 months

= [(0.093 lbs/hr from pilot) + (0.842 lb/hr from purge gas)] X 8,760 hrs/yr X 1 ton/2,000 lbs X 1 year/12 months

= 0.34 ton per month, as a rolling, 12-month summation

c. Emissions Limitation:

PE shall not exceed 0.007 ton per month as a rolling, 12-month average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following calculation:

PE (ton/yr) = [(PE emission factor for pilot (8.1 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (100% - from permittee's application) X Maximum natural gas usage for pilot (0.000234 MMscf/hr - from permittee's application))

+ (PE emission factor for purge gas (8.1 lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (98% - from permittee's application) X Maximum natural gas usage for purge gas (0.002160 MMscf/hr – from permittee's application))]

X 8,760 hours of operation per year X 1 ton/2,000 lbs X 1 year/12 months

= [(0.002 lbs/hr from pilot) + (0.017 lb/hr from purge gas)] X 8,760 hrs/yr X 1 ton/2,000 lbs X 1 year/12 months

= 0.007 ton per month, as a rolling, 12-month summation

d. Emissions Limitation:

VOC emissions from the pilot and purge gas going to the flare shall not exceed 0.11 ton per month as a rolling, 12-month average.



Applicable Compliance Method:

Compliance shall be demonstrated based upon the following calculation:

VOC (ton/yr) = [(VOC emission factor for pilot (5.8lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (100% - from permittee's application) X Maximum natural gas usage for pilot (0.000234 MMscf/hr - from permittee's application))

+ (VOC emission factor for purge gas (5.8lb/MMscf – AP-42 Table 13.5-1 (9/91)) X Combustion Percentage (98% - from permittee's application) X Maximum natural gas usage for purge gas (0.002160 MMscf/hr – from permittee's application))

+ (Moles of VOC/hr (5.69 mol/hr – from permittee's application)) X (1 – Combustion Percent (98% - from permittee's application)) X Molecular weight (20.05 – from permittee's application) X % by wt. VOC (12.19% - from permittee's application))]

X 8,760 hours of operation per year X 1 ton/2,000 lbs X 1 year/12 months

= [(0.0014lbs/hr from pilot) + (0.012lb/hr from purge gas) + (0.278 lb/hr from purge gas fugitives)] X 8,760 hrs/yr X 1 ton/2,000 lbs X 1 year/12 months

= 0.11 ton per month, as a rolling, 12-month summation

e. 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), 60.5410(e)(5) and 60.5413(a)(1). 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 60.5413(a)(1).



Final Permit-to-Install and Operate

Harrison Hub Fractionation Plant

Permit Number: P0117878

Facility ID: 0634005028

Effective Date: 11/13/2014

- 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 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.



2. P801, Fugitive emission leaks from valves, pumps, flanges, relief valves, compressors, and other miscellaneous sources.

Operations, Property and/or Equipment Description:

Fugitive emission leaks from valves, pumps, flanges, relief valves, compressors, and other miscellaneous sources. Fugitive emissions will be minimized through a leak detection and repair program.

(Chapter 31 modification of P0110476 issued 1/16/2013, due to addition of components (valves, flanges, pumps, etc.) associated with Fractionation Train #3, stabilized condensate storage rail car and truck loading, the two 200,000 bbl refrigerated propane atmospheric tanks, the two 125,000 bbl refrigerated butane atmospheric tanks, the refrigeration process unit and one 30,000 bbl propane sphere.)

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 02/20/2013	Volatile organic compound (VOC) emissions shall not exceed 0.88 tons per month as a rolling, 12-month average.
b.	40 CFR Part 60, Subpart OOOO. (40 CFR 60.5365) [In accordance with 40 CFR 60.5365(e) and (f), this emissions unit includes storage tanks and extracts natural gas liquids.	See b)(2)a through b)(2)d. and c)(1).



(2) Additional Terms and Conditions

- a. In accordance with 40 CFR Part 60, Subpart OOOO, the following pieces of equipment are affected facilities in a process unit in an onshore natural gas processing plant constructed after August 23, 2011. Storage vessels and 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 October 15, 2012 or upon startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in 60.5401.
- c. Compliance with 40 CFR 60.482-1 to 60.482-11 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.
- d. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5).

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	References applicable equipment leak standards of Subpart VVa.
60.5400(f)	Each piece of equipment is presumed to be in VOC service or wet gas service unless demonstrated otherwise.
60.5401	Defines exceptions to equipment leak standards.
60.5402	Defines alternative emissions limitations for equipment leaks.
60.5410	Initial compliance determinations for storage vessels and equipment leaks using paragraphs (a) through (g) of this section.
60.5411	Initial compliance determinations for closed vent systems routing materials from storage vessels.
60.5412	Initial compliance determinations for control devices for storage vessels.
60.5413	Performance testing of control devices for storage vessels.



60.5416	Initial and continuous cover and closed vent system inspection and monitoring requirements for storage vessels.
60.5417	Continuous monitoring requirements for storage tank control devices.

* The permittee may choose to comply with any alternative standards provided in 40 CFR Part 60, Subparts OOOO and VVa.

d) Monitoring and/or Recordkeeping Requirements

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

60.5415	Continuous compliance determinations for natural gas processing and storage vessels.
60.5420	Initial notifications, reporting and record keeping requirements.
60.5421	Additional record keeping requirements for natural gas processing facilities subject to VOC requirements.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.
- (3) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart OOOO, including the following sections:

60.5420	Initial notifications, reporting and record keeping requirements.
60.5422	Additional reporting keeping requirements for natural gas processing facilities subject 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. Emission Limitation:

VOC emissions shall not exceed 0.88 tons per month as a rolling, 12-month average.

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be demonstrated by the following calculation based on the emission factors (lb/hr/source) in TCEQ guidance: "Oil and Gas Production Operations (10/2002) for components in gas, heavy oil, light oil and water/oil service and the record keeping in d)(1):

VOC = [(# of valves in gas service X gas service valve EF X gas service valve control efficiency) + (# of valves in light oil service X light oil service valve EF X light oil service valve control efficiency) + (# of valves in heavy oil service X heavy oil service valve EF)

+ (# of pumps in light oil service X light oil service pump EF X light oil service pump control efficiency) + (# of pumps in heavy oil service X heavy oil service pump EF)

+ (# of flanges in gas service X gas service flange EF)+ (# of flanges in light oil service X light oil service EF) + (# of flanges in heavy oil service X heavy oil service flange EF)

+ (# of other* points in gas service X gas service other equipment EF)

+ (# of relief valves in gas service X gas service relief valves EF)

X (8,760 hours/year) / (2,000 lbs/ton) / (12 months/year)

Where:

Valve EFs = 0.00992 lb/hr/source for gas service,
 0.00551 lb/hr/source for light oil service,
 0.0000185 lb/hr/source for heavy oil service,

Pump Seal EFs = 0.02866 lb/hr/source for light oil service,
 0.00113 lb/hr/source for heavy oil service,

Flange EFs = 0.00086 lb/hr/source for gas service,



0.000243 lb/hr/source for light oil service

0.00000086 lb/hr/source for heavy oil service,

Other* EFs = 0.0194 lb/hr/source for gas service, and

Relief Valves = 0.0194 lb/hr/source for gas service.

LDAR monitoring control efficiencies = 97% for valves in gas service,

97% for valves in light oil service,

75% for pumps in light oil service,

30% for flanges in gas service,

30% for flanges in light oil service,

30% for flanges in heavy oil service,

75% for other* in gas service, and

97% for relief valves in gas service.

* includes compressors, drains/vents, pressure safety valves and sample points

g) Miscellaneous Requirements

(1) None.