



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

1/6/2016

Mr. Ryan Crowe
 Ormet Production Facility
 125 Putnam Avenue
 Marietta, OH 45750

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	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: 0656005011
 Permit Number: P0118463
 Permit Type: Initial Installation
 County: Monroe

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

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

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Ormet Production Facility**

Facility ID:	0656005011
Permit Number:	P0118463
Permit Type:	Initial Installation
Issued:	1/6/2016
Effective:	1/6/2016
Expiration:	4/15/2024



Division of Air Pollution Control
Permit-to-Install and Operate
for
Ormet Production Facility

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Final Permit-to-Install and Operate
Ormet Production Facility
Permit Number: P0118463
Facility ID: 0656005011
Effective Date: 1/6/2016

Authorization

Facility ID: 0656005011
Application Number(s): A0052785, A0054070
Permit Number: P0118463
Permit Description: Initial installation of 690 hp engine, one existing 15 mmscf/day dehydration unit and one 120 mmscf/day dehydration unit other existing units are included in PTIO P0119394 which are Chapter 31 modifications.
Permit Type: Initial Installation
Permit Fee: \$2,200.00
Issue Date: 1/6/2016
Effective Date: 1/6/2016
Expiration Date: 4/15/2024
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Ormet Production Facility
43879 St Rte 7
Hannibal, OH 43931

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: P0118463

Permit Description: Initial installation of 690 hp engine, one existing 15 mmscf/day dehydration unit and one 120 mmscf/day dehydration unit other existing units are included in PTIO P0119394 which are Chapter 31 modifications.

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

Emissions Unit ID:	P006
Company Equipment ID:	P016
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P008
Company Equipment ID:	DEHY-15
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P009
Company Equipment ID:	DEHY-2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Ormet Production Facility
Permit Number: P0118463
Facility ID: 0656005011
Effective Date: 1/6/2016

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
Ormet Production Facility
Permit Number: P0118463
Facility ID: 0656005011
Effective Date: 1/6/2016

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) 2.
 - 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. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), for this project were not necessary because the maximum annual emissions for each toxic air containment as defined in OAC rule 3745-114-01 for the emissions units not exempted from modeling per Ohio EPA Engineering Guide #69, 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.
3. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines at Area Sources. Although Ohio EPA has determined that this GACT applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, US EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by US EPA. For more information on the area source rules, please refer to the following US EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.
4. Specific emissions units contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ and OOOO (P006). The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the e-CFR website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.
5. Specific emissions units contained in this permit are subject to 40 CFR Part 63, Subpart HH (P008 and P009). The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the e-CFR website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.
5. Within six months of startup of the facility, the permittee shall collect and analyze a representative sample of the incoming gas and liquids. The permittee shall use the results of the analysis to recalculate the emissions from the various components at the facility utilizing the GRI-GLYCalc or other standard software/emission factors. The permittee shall then compare the results of the revised calculations with the calculations submitted with the air pollution control permit application(s). If the emissions results are significantly different from those results submitted with the application, then the applicant shall submit the revised calculations to the appropriate District Office or Local Air Authority.



Final Permit-to-Install and Operate

Ormet Production Facility

Permit Number: P0118463

Facility ID: 0656005011

Effective Date: 1/6/2016

The applicant should provide all input data used, the basis for each input value used, and the results provided by the program.

6. The Compressor Station must comply with the Used Oil Management Standards of OAC Chapter 3745-279.



Final Permit-to-Install and Operate
Ormet Production Facility
Permit Number: P0118463
Facility ID: 0656005011
Effective Date: 1/6/2016

C. Emissions Unit Terms and Conditions

1. P006, 690 HP Compressor Engine

Operations, Property and/or Equipment Description:

CAT 3508BLE SI 4-stroke natural gas fired, lean-burn with catalytic oxidation controlling 93% for CO, 50% for VOC, 76% for formaldehyde, and 50% for total HAPs.

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 6/30/08	Install an engine to meet 0.5 g/hp-hr for nitrogen oxide (NO _x) emissions. Install an engine with catalytic oxidation designed to meet 0.20 g/hp-hr for carbon monoxide (CO) emissions. Install an engine with catalytic oxidation designed to meet 0.38 g/hp-hr for volatile organic compounds (VOC) emissions. Particulate emissions (PE) shall not exceed 0.02 ton per month as averaged over a 12-month, rolling period. See b)(2)a. below

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/1/2008	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, VOC, and PE emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr.</p> <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr taking into account the voluntary restriction from OAC rule 3745-31-05(E).</p> <p>See b)(2)b. below.</p>
c.	OAC rule 3745-31-05(E), as effective 6/1/2008	<p>Install and operate an engine with a catalyst designed to meet 0.20 g/hp-hr for CO emissions.</p> <p>CO emission shall not exceed 1.30 tpy.</p> <p>Install and operate catalytic oxidation that reduces formaldehyde emissions by at least 76%.</p> <p>Formaldehyde emissions shall not exceed 0.48 tpy.</p>
d.	<p>40 CFR Part 60, Subpart JJJJ (40 CFR 60. 4230 – 60.4248)</p> <p>[In accordance with 40 CFR Part 60.4230(a), and 40 CFR Part 60.4230(a)(4)(i), this emissions unit is a stationary spark ignition internal combustion engine commencing construction and manufactured after July 1, 2010, subject to the emission limitations and control measures specified in this section.]</p>	<p>NO_x emissions shall not exceed 1.0 g/hp-hr or 82 ppmvd at 15% O₂.</p> <p>CO emissions shall not exceed 2.0 g/hp-hr or 270 ppmvd at 15% O₂.</p> <p>VOC emissions shall not exceed 0.7 g/hp-hr or 60 ppmvd at 15% O₂.</p> <p>[40 CFR 60.4233(e) and 40 CFR Part 60, Subpart JJJJ, Table 1]</p>
e.	<p>40 CFR Part 60, Subpart OOOO, (40 CFR 60. 5360 – 60.5430)</p> <p>[In accordance with 40 CFR Part</p>	See c)(4), d)(7) and e)(5).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	60.5365(c) this emissions unit is a reciprocating compressor engine located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment subject to the maintenance, operational, monitoring, recordkeeping, and reporting measures specified in this section.]	
f.	40 CFR Part 60.1 – 19 (40 CFR 60.4246 and 60.5425)	Table 3 to Subparts JJJJ and OOOO of 40 CFR Part 60 – Applicability of General Provisions to Subparts JJJJ and OOOO, shows which part of the General Provisions in 40 CFR Part 60.1 – 19 apply.
g.	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by the rule.
h.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input.
i.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
j.	OAC rule 3745-110-03(F)	This emission unit is subject but exempt from the requirement of OAC rule 3745-110-03 per OAC 3745-110-02(A)(2)(b).

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio State Implementation Plan SIP.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The permittee shall install and operate the engine with a catalytic oxidation for control of CO, VOC, and formaldehyde emissions and shall maintain the engine and catalytic

oxidation in accordance with the manufacturer’s recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

- (3) In the event the engine or catalytic oxidation is not operating in accordance with the manufacturer’s recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the engine shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- (4) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subparts JJJJ and OOOO, including the following sections:

60.4234	Operate and maintain engine in compliance with emission standards over the life of the engine
60.4243(b)(2) and 60.4243(b)(2)(ii)	For non-certified engines, maintain and operate engine with good air pollution control practices
60.4243(e)	Use of propane for up to 100 hours per year during emergencies
60.5385(a), 60.5415(c)(3)	Replace rod packing either before the total hours of operation reaches 26,000 hours or the most recent rod packing replacement reaches 36 months

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

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall maintain documentation of the manufacturer’s recommendations, instructions, operating manuals for the engine and catalytic oxidation, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the engine’s catalytic oxidation to determine whether it is operating in accordance with the manufacturer’s recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer’s recommended inspection frequency, and it shall be made available to the Ohio EPA upon request.

- (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the engine's catalytic oxidation while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (5) The permittee shall document each inspection (periodic and annual) of the engine catalytic oxidation and shall maintain the following information:
 - a. The date of the inspection;
 - b. A description of each/any problem identified and the date it was corrected;
 - c. A description of any maintenance and repairs performed; and
 - d. The name of the person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (6) The permittee shall maintain records that document any time periods when the catalytic oxidation was not in service when the emissions unit(s) was/were in operation, as well as a record of all operations during which the engine was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (7) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 60, Subparts A, JJJJ, and OOOO, including the following sections:

60.4243(b)(2)(ii), and 60.4245(a)(i),	Keep maintenance plan and records of conducted maintenance, and all notifications documentation that the engine meets the emissions standards
60.5410(c)(1) and (4), 60.5415(c)(1), 60.5385, 60.5420(c)(3) and 60.7(f)	Continuously monitor and maintain records of hours of operation or number of months, maintain rod packing replacements records and records of deviations of operating 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, JJJJ and OOOO, including the following sections:

60.7 and 60.4245(c)	Submit an initial notification (non-certified engines)
60.4245(d)	Submit performance test copies within 60 days after the test has been completed
60.5385, 60.5410(c)(3), 60.5415(c)(2), and 60.5420(b)(3)	Submit annual reports within 90 days after the end of the initial compliance period and no later than the same date each subsequent year

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:
 Install an engine to meet 0.5 g/hp-hr for nitrogen oxide (NO_x) emissions.

 Applicable Compliance Method:

 Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).
 - b. Emissions Limitation:

 Install and operate an engine with a catalyst designed to meet 0.20 g/hp-hr for CO emissions.

 CO emission shall not exceed 1.30 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2). Compliance with the annual emission limitation is demonstrated by the following equation:

$$\{Ef * HP * \frac{1}{\frac{453.50g}{lb}} * \frac{8,760hrs}{yr} * (1 - CE)\} / (2,000lbs/ton)$$

Where:

- Ef= emission factor, 2.79 g/bhp-hr, specified in the manufacturer’s engine specification sheet obtained from Caterpillar,
- HP = the power output rating of this unit, 690 bhp
- CE = control efficiency, 93%

c. Emissions Limitation:

Install an engine with catalytic oxidation designed to meet 0.38 g/hp-hr for VOC emissions.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

Compliance with the annual emission limitation is demonstrated by the following equation:

$$\{Ef * HP * \frac{1}{\frac{453.50g}{lb}} * \frac{8,760hrs}{yr} * (1 - CE)\} / (2,000lbs/ton) \text{ Where:}$$

- Ef= emission factor, 0.76 g/bhp-hr, specified in the manufacturer’s engine specification sheet obtained from Caterpillar,
- HP = the power output rating of this unit, 690 bhp
- CE = control efficiency, 50%

d. Emissions Limitation:

NO_x emissions shall not exceed 1.0 g/hp-hr. or 82 ppmvd at 15% O₂.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

e. Emissions Limitation:

CO emissions shall not exceed 2.0 g/hp-hr or 270 ppmvd at 15% O₂.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

f. Emissions Limitation:

VOC emissions shall not exceed 0.7 g/hp-hr or 60 ppmvd at 15% O₂.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

g. Emissions Limitation:

PE shall not exceed 0.062 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance is demonstrated by the applicant's application listing the emission factor for this engine as 0.005 lb/MMBtu, which is less than the emission limitation.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources." Alternative US EPA-approved test methods may be used with prior approval from Ohio EPA, SEDO, and the procedures specified in OAC rule 3745-17-03(B)(10).

h. Emissions Limitation:

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

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- (2) Pursuant to 40 CFR 60.4243(b)(2)(ii), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(E) and Table 1 of 40 CFR Part 60 Subpart JJJJ, the permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the procedures specified in 40 CFR Part 60, Appendix A, 40 CFR 60.8, 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ, Table 2, and the following requirements:

- a. An initial performance test shall be performed within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit. Subsequent performance tests shall be performed every 8,760 hours or three years whichever comes first.
- b. The emission testing shall be conducted to demonstrate compliance with the mass emissions limitations in b)(1)a., b)(1)c. and b)(1)d. for VOC, NO_x CO, and formaldehyde. The following test methods shall be employed to demonstrate compliance with the emissions limitations and design standards for VOC, NO_x CO, and formaldehyde:

Methods 1-4 and 7E of CFR Part 60, Appendix A for NO_x;

Methods 1-4 and 10 of 40 CFR Part 60, Appendix A for CO; and

Methods 1-4, 25A and 18 of 40 CFR Part 60, Appendix A, or Method 320 of 40 CFR Part 63, Appendix A for VOC (as NMNEHC); and

Methods 320 or 323 of 40 CFR Part 63, Appendix A.
- c. If the stationary internal combustion engine is rebuilt or undergoes major repair or maintenance, the permittee shall conduct a subsequent performance test.
- d. Each performance test must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 of 40 CFR Part 60, Subpart JJJJ.
- e. Not later than 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 emission 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 emission 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.



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Ormet Production Facility
Permit Number: P0118463
Facility ID: 0656005011
Effective Date: 1/6/2016

- g) Miscellaneous Requirements
 - (1) None.

2. P008, 15 MMscfd Dehydration Unit

Operations, Property and/or Equipment Description:

15 MMscfd dehydration unit with reboiler, regenerator, and flash tank off gas with 100% capture and either reused as fuel or directed to combustion units (P010-P014) with 99.0% control or greater for VOC and HAP emissions.

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 June 30, 2008	Install a system to capture 100% of volatile organic compound (VOC) emissions where emissions for regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC emissions from this contaminant source since the calculated annual emission rate is less than 10 TPY taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(E), as effective June 30, 2008	<p>VOC emissions shall not exceed 1.30 TPY.</p> <p>Install and operate a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.</p> <p>Total HAPs shall not exceed 0.10 TPY.</p> <p>Xylene emissions shall not exceed 0.018 tpy.</p> <p>Install and operate a system to capture 100% of total HAPs emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.</p>
d.	<p>40 CFR Part 63, Subpart HH (40 CFR 63.760-63.779)</p> <p>[In accordance with 40 CFR 63.760(a)(2)-(3), this emissions unit is a large dehydration unit located at an area source of HAPs that processes, upgrades, or stores natural gas or hydrocarbon liquids prior to the point of custody transfer from the facility.]</p>	<p>See b)(2)c. below.</p> <p>[63.765(b)(1)(ii)]</p>
e.	40 CFR 63.1-15 (40 CFR 63.764)	Table 2 of Subpart HH of 40 CFR Part 63 shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. This BAT emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. The dehydration unit located at this facility is subject to 40 CFR Part 63, Subpart HH, NESHAP from Oil and Natural Gas Production Facilities. The dehydration unit at this facility has chosen to comply with the requirements by connecting the process vent to control device or combination of control devices through a closed vent system and reducing BTEX emissions to less than 0.9 megagrams per year.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restriction requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.764(a)	Must comply with general provisions in 63.1
63.764(j)	Facility must operate and maintain control equipment consistent with safety and good air pollution control practices for minimizing emissions
63.765(b)(1)(ii)	Use of closed vent system and controls to decrease benzene emissions to less than 0.9 megagrams per year
63.765(c)(3)	Flash tank control requirements
63.771(c)	Closed vented requirements
63.771(d)(1), (d)(4)(i)	Control device requirements

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the enclosed combustors, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (2) The permittee shall conduct periodic inspections of the enclosed combustors to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency, and it shall be made available to Ohio EPA upon request.
- (3) In addition to the recommended periodic inspections, not less than once each calendar year, the permittee shall conduct a comprehensive inspection of the enclosed combustors while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

- (4) The permittee shall document each inspection (periodic and annual) of the enclosed combustors and shall maintain the following information:
- a. the date of the inspection;
 - b. a description of each/any problem identified and the date it was corrected;
 - c. a description of any maintenance and repairs performed; and
 - d. the name of the person who performed the inspection.

These records, and any necessary maintenance or repairs that were completed, shall be maintained at the facility for not less than five years from the date the inspection and shall be made available to the appropriate Ohio EPA District Office or local air upon request.

- (5) The permittee shall maintain records that document any time periods when the enclosed combustors was not in service when the emissions unit(s) was/were in operation, as well as a record of all operations during which the flare were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to Ohio EPA upon request.
- (6) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measure and record the temperature of the enclosed combustors when the organic vapors are being routed to the enclosed combustors, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. These records shall be maintained for a period of no less than five years. These records can be kept electronically, provided they can be made available to the appropriate Ohio EPA District Office or local air agency.
- (7) The composition of the gas being processed may vary due to the nature of the industry. The company will sample the gas semiannually to perform a detailed gas analysis in order to determine if the composition has changed such that it will result in an increase in emissions of any toxic air contaminant. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (8) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.760(a)(1)(ii)	Maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year.
63.773(b)	Control devices other than flares shall develop an inspection and maintenance plan for each device

63.773(c)	Inspection and leak protocols for closed-vent systems
63.773(d)(1),(3)(i)(H)	Continuous monitoring requirements for control devices
63.773(d)(6),(7)	Excursion definitions for control devices and violations
63.774(b)	Records requirements
63.774(c)	Document method for achieving and demonstrating compliance with 0.9 megagrams per year of benzene
63.774(e)	Flare recordkeeping requirements
63.774(f)	Records of optimal glycol circulation rate
63.774(g)	Malfunction operation recordkeeping
63.774(h)	Records requirements of control device that is not a flare

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) 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.
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (4) The permittee shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.764(b)	Reports submitted to appropriate administrator
63.775(a)	Compliance with 63.1-63.16 per Table 2 of this rule
63.775 (c)(1)	Initial notification to USEPA's Office of Air Quality Planning and Standards
63.775(c)(7)	Supplemental information to be submitted with initial notification
63.775(d)	Notification of Compliance Status Report with supplemental information dependent on closed-vent system and type of control device
63.775(f)	Process change notifications
63.775(g)(1)	WebFIRE reporting 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. Design Efficiency:

Install a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the combustors with a minimum of 99.0% control efficiency.

Install a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the combustors with a minimum of 99.0% control efficiency.

Applicable Compliance Method:

Compliance is determined by the manufacturer's design efficiency to capture 100% of VOC emissions, where regenerator and flash tank vapors are either reused as fuel in the reboiler or sent to the combustors with a minimum of 99.0% control efficiency.

b. Emissions Limitation:

VOC emissions shall not exceed 1.30 TPY.

Applicable Compliance Method:

The permittee shall determine compliance with the tpy VOC emissions (excludes methane and ethane) by using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual or other Ohio EPA approved software. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

c. Design Efficiency:

Install and operate a system to capture 100% of HAP emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.

Applicable Compliance Method:

Compliance is determined by the manufacturer's design efficiency install and operate a system to capture 100% of total HAPs emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler are sent to the combustors with a minimum of 99.0% control efficiency.



d. Emissions Limitations:

Xylene emissions shall not exceed 0.018 tpy.

Applicable Compliance Method:

The permittee shall determine compliance with the tpy VOC emissions (excludes methane and ethane) by using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual or other Ohio EPA approved software. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

g) Miscellaneous Requirements

(1) None.

3. P009, 120 MMscfd Dehydration Unit

Operations, Property and/or Equipment Description:

120 MMscfd dehydration unit with reboiler, regenerator, and flash tank off gas with 100% capture and either reused as fuel or directed to combustion units (P010-P014) with and a 99.0% control or greater for VOC and HAP emissions.

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 June 30, 2008	Install a system to capture 100% of volatile organic compound (VOC) emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC emissions from this contaminant source since the calculated annual emission rate is less than 10 TPY taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>OAC rule 3745-31-05(E), as effective June 30, 2008</p>	<p>VOC emissions shall not exceed 0.30 TPY.</p> <p>Install and operate a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.</p> <p>Total hazardous air pollutants (HAPs) shall not exceed 0.10 TPY.</p> <p>Install and operate a system to capture 100% of total HAP emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.</p> <p>Xylene emissions shall not exceed 0.078 tpy.</p> <p>Toulene emissions shall not exceed 0.081 tpy.</p> <p>Ethylbenzene emissions shall not exceed 0.019 tpy.</p>
	<p>40 CFR Part 63, Subpart HH (40 CFR 63.760-63.779)</p> <p>[In accordance with 40 CFR 63.760(a)(2)-(3), this emissions unit is a large dehydration unit located at an area source of HAPs that processes, upgrades, or stores natural gas or hydrocarbon liquids prior to the point of custody transfer from the facility.]</p>	<p>See b)(2)c. below.</p> <p>[63.765(b)(1)(ii)]</p>
	<p>40 CFR 63.1-15 (40 CFR 63.764)</p>	<p>Table 2 of Subpart HH of 40 CFR Part 63 shows which parts of the General Provisions in 40 CFR 63.1-15 apply.</p>

(2) Additional Terms and Conditions

- a. This BAT emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. The dehydration unit located at this facility is subject to 40 CFR Part 63, Subpart HH, NESHAP from Oil and Natural Gas Production Facilities. The dehydration unit at this facility has chosen to comply with the requirements by connecting the process vent to control device or combination of control devices through a closed vent system and reducing BTEX emissions to less than 0.9 megagrams per year.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restriction requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.764(a)	Must comply with general provisions in 63.1
63.764(j)	Facility must operate and maintain control equipment consistent with safety and good air pollution control practices for minimizing emissions
63.765(b)(1)(ii)	Use of closed vent system and controls to decrease benzene emissions to less than 0.9 megagrams per year
63.765(c)(3)	Flash tank control requirements
63.771(c)	Closed vented requirements
63.771(d)(1), (d)(4)(i)	Control device requirements

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the enclosed combustors, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (2) The permittee shall conduct periodic inspections of the enclosed combustors to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency, and it shall be made available to Ohio EPA upon request.

- (3) In addition to the recommended periodic inspections, not less than once each calendar year, the permittee shall conduct a comprehensive inspection of the enclosed combustors while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (4) The permittee shall document each inspection (periodic and annual) of the enclosed combustors and shall maintain the following information:
 - a. the date of the inspection;
 - b. a description of each/any problem identified and the date it was corrected;
 - c. a description of any maintenance and repairs performed; and
 - d. the name of the person who performed the inspection.

These records, and any necessary maintenance or repairs that were completed, shall be maintained at the facility for not less than five years from the date the inspection and shall be made available to the appropriate Ohio EPA District Office or local air upon request.

- (5) The permittee shall maintain records that document any time periods when the enclosed combustors was not in service when the emissions unit(s) was/were in operation, as well as a record of all operations during which the enclosed combustors were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to Ohio EPA upon request.
- (6) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measure and record the temperature of the enclosed combustors when the organic vapors are being routed to the flare, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. These records shall be maintained for a period of no less than five years. These records can be kept electronically, provided they can be made available to the appropriate Ohio EPA District Office or local air agency.
- (7) The composition of the gas being processed may vary due to the nature of the industry. The company will sample the gas semiannually to perform a detailed gas analysis in order to determine if the composition has changed such that it will result in an increase in emissions of any toxic air contaminant. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (8) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.760(a)(1)(ii)	Maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year.
63.773(b)	Control devices other than flares shall develop an inspection and maintenance plan for each device
63.773(c)	Inspection and leak protocols for closed-vent systems
63.773(d)(1),(3)(i)(H)	Continuous monitoring requirements for control devices
63.773(d)(6),(7)	Excursion definitions for control devices and violations
63.774(b)	Records requirements
63.774(c)	Document method for achieving and demonstrating compliance with 0.9 megagrams per year of benzene
63.774(e)	Flare recordkeeping requirements
63.774(f)	Records of optimal glycol circulation rate
63.774(g)	Malfunction operation recordkeeping
63.774(h)	Records requirements of control device that is not a flare

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) 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.
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (4) The permittee shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HH, including the following sections:

63.764(b)	Reports submitted to appropriate administrator
63.775(a)	Compliance with 63.1-63.16 per Table 2 of this rule
63.775 (c)(1)	Initial notification to USEPA's Office of Air Quality Planning and Standards
63.775(c)(7)	Supplemental information to be submitted with initial notification

63.775(d)	Notification of Compliance Status Report with supplemental information dependent on closed-vent system and type of control device
63.775(f)	Process change notifications
63.775(g)(1)	WebFIRE reporting 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. Design Efficiency:

Install a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.

Install and operate a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.

Applicable Compliance Method:

Compliance is determined by the manufacturer’s design efficiency install and operate a system to capture 100% of VOC emissions where emissions from regenerator and flash tank are either reused as fuel in the reboiler or are sent to the combustors with a minimum of 99.0% control efficiency.

b. Emissions Limitation:

VOC emissions shall not exceed 0.30 TPY.

Applicable Compliance Method:

The permittee shall determine compliance with the tpy VOC emissions (excludes methane and ethane) by using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual or other Ohio EPA approved software. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1).

c. Design Efficiency:

Install and operate a system to capture 100% of HAP emissions where emissions for regenerator and flash tank are either reused as fuel in the reboiler or sent to the enclosed combustors with a minimum of 99.0% control efficiency.

Applicable Compliance Method:

Compliance is determined by the manufacturer's design efficiency install and operate a system to capture 100% of total HAPs emissions where emissions from regenerator are either reused as fuel in the condenser and flash tank are sent to the combustors with a minimum of 99.0% control efficiency.

d. Emissions Limitations:

Xylene emissions shall not exceed 0.078 tpy.

Toulene emissions shall not exceed 0.081 tpy.

Ethylbenzene emissions shall not exceed 0.019 tpy.

Applicable Compliance Method:

The permittee shall determine compliance with the tpy VOC emissions (excludes methane and ethane) by using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual or other Ohio EPA approved software. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

g) Miscellaneous Requirements

(1) None.