



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

12/2/2015

Certified Mail

Mr. John McGreevy  
American Energy - Utica LLC - Hamilton 19-11N-6W  
301 NW 63RD  
SUITE 600  
Oklahoma City, OK 73116

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0634005086  
Permit Number: P0118899  
Permit Type: Initial Installation  
County: Harrison

Dear Permit Holder:

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

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

**How to appeal this permit**

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

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

## **How to save money, reduce pollution and reduce energy consumption**

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

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

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

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

Sincerely,



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**

**American Energy - Utica LLC - Hamilton 19-11N-6W**

Facility ID:	0634005086
Permit Number:	P0118899
Permit Type:	Initial Installation
Issued:	12/2/2015
Effective:	12/2/2015
Expiration:	4/23/2024





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
American Energy - Utica LLC - Hamilton 19-11N-6W

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**Final Permit-to-Install and Operate**  
American Energy - Utica LLC - Hamilton 19-11N-6W  
**Permit Number:** P0118899  
**Facility ID:** 0634005086  
**Effective Date:** 12/2/2015

## Authorization

Facility ID: 0634005086  
Application Number(s): A0053415, A0053588  
Permit Number: P0118899  
Permit Description: 12 Additional Tank(s) Group -T002. 4 @ 500 bbl condensate tanks, and 8 @ 500 bbl produced water storage tanks controlled by a VRU with flares as backup (EUs P001 and P004) with greater than 98% overall control efficiency when the VRU is down.  
Permit Type: Initial Installation  
Permit Fee: \$1,800.00  
Issue Date: 12/2/2015  
Effective Date: 12/2/2015  
Expiration Date: 4/23/2024  
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

American Energy - Utica LLC - Hamilton 19-11N-6W  
34385 Kennedy Ridge Rd  
Flushing, OH 43977

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

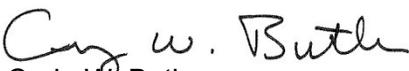
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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**  
American Energy - Utica LLC - Hamilton 19-11N-6W  
**Permit Number:** P0118899  
**Facility ID:** 0634005086  
**Effective Date:** 12/2/2015

## Authorization (continued)

Permit Number: P0118899

Permit Description: 12 Additional Tank(s) Group -T002. 4 @ 500 bbl condensate tanks, and 8 @ 500 bbl produced water storage tanks controlled by a VRU with flares as backup (EUs P001 and P004) with greater than 98% overall control efficiency when the VRU is down.

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

<b>Emissions Unit ID:</b>	<b>T002</b>
Company Equipment ID:	T002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
American Energy - Utica LLC - Hamilton 19-11N-6W  
**Permit Number:** P0118899  
**Facility ID:** 0634005086  
**Effective Date:** 12/2/2015

## **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**  
American Energy - Utica LLC - Hamilton 19-11N-6W  
**Permit Number:** P0118899  
**Facility ID:** 0634005086  
**Effective Date:** 12/2/2015

## **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.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 for the emissions units not exempted from modeling per Ohio EPA Engineering Guide #69, maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 TPY 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 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.
4. The permittee shall submit an annual PER to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.
5. This facility is subject to 40 CFR Part 60, Subpart OOOO. 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. Emissions from each tank will be less than 6 TPY and therefore 40 CFR Part 60, Subpart OOOO is not applicable for T002.
6. Within six months of startup of the facility, the permittee shall collect and analyze a representative sample of the gas and liquids at the inlet of condensate tanks. The permittee shall use the results of the analysis to recalculate the emissions from the various components at the facility utilizing 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. The applicant should provide all input data used, the basis for each input value used, and the results provided by the program.

7. The facility must comply with the Used Oil Management Standards of OAC Chapter 3745-279.
8. Abbreviations throughout are as follows:

**Pollutants**

CO	carbon monoxide
VOC	volatile organic compound

**Units**

TPY	tons per year
bbl	barrel
Mg	megagram
d	day
hr	hour
yr	year

**Regulations**

OAC	Ohio Administrative Code
ORC	Ohio Revised Code
CFR	Code of Federal Regulations
e-CFR	Electronic Code of Federal Regulation
BAT	Best Available Technology
MACT	Maximum Achievable Control Technology
NSPS	New Source Performance Standards

**General**

PTE	potential-to-emit
PTIO	permit-to-install-and-operate
PER	permit evaluation report
SIP	State Implementation Plan
VRU	vapor recovery unit
CE	control efficiency
DE	destruction efficiency
EF	emission factor
EU	emissions unit



**Final Permit-to-Install and Operate**  
American Energy - Utica LLC - Hamilton 19-11N-6W  
**Permit Number:** P0118899  
**Facility ID:** 0634005086  
**Effective Date:** 12/2/2015

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

**1. T002 - Additional Tanks Group**

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

12 Additional Tank(s) Group – T002. 4 – 500 bbl condensate tanks, and 8 – 500 bbl produced water storage tanks controlled by a VRU with flares as backup (EUs P001 and P004) with ≥ 98% overall control efficiency when the VRU is down.

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 VRU and flare designed to achieve ≥ 98% VOC DE, and overall control efficiency ≥ 98%.  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 the VOC emissions from this air contaminant source since the calculated annual emission rate is < 10 TPY due to the voluntary restriction from OAC rule 3745-31-05(E).  See b)(2)b. below.
c.	OAC rule 3745-31-05(E), as effective June 30, 2008	VOC emissions from the 12 tanks included in this permit combined shall not exceed 1.87 TPY.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Install and operate a VRU and flare with ≥ 98% VOC overall control efficiency.
d.	40 CFR Part 60, Subpart OOOO (60.5360-60.5430)  In accordance with 40 CFR, 60.5365(e), each tank included in this emissions unit is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment, or natural gas transmission and storage segment.	Pursuant to 40 CFR Part 60.5365(e), each storage vessel at this facility has a PTE of less than 6 TPY and is, therefore, exempt from the requirements of 40 CFR Part 60, Subpart OOOO.  See b.(2)c. below.
e.	40 CFR Part 60, Subpart A (60.1-60.19)	Table 3 of 40 CFR Part 60, Subpart OOOO listed applicable requirements of 60.1 through 60.19.
f.	40 CFR 60.5365(e) OAC 3745-31-05(F)	The permittee accepts a voluntarily limit to restrict the potential VOC emissions from each storage vessel to less than 6 tons per year.

(2) Additional Terms and Conditions

- a. This BAT emissions limit applies until US EPA approves OAC 3745-31-05(A)(3)(a)(ii) (the < 10 TPY BAT exemption) as part of the Ohio SIP.
- b. These requirements apply once US EPA approves OAC 3745-31-05(A)(3)(a)(ii) (the < 10 TPY BAT exemption) as part of the Ohio SIP.
- c. The permittee shall calculate the potential for VOC emissions for each single storage vessel (defined in 40 CFR 60.5430) using an accepted model or calculation methodology. Emissions of VOC shall be based on the maximum average daily throughput determined for a 30-day period of production 30 days after startup for storage vessels installed after 4/12/2013, i.e., Group 2 storage vessels.
- d. Any vapors from storage vessels that are recovered and routed to a vapor recovery unit (VRU) system meeting the cover and closed vent system requirements specified in 40 CFR 60.5411(b) and (c) are not required to be included in the determination of VOC potential to emit for purposes of determining affected facility status for NSPS Subpart OOOO. However, if the VRUs are removed or if the system fails to meet the cover and closed vent

system requirements of Subpart OOOO, the potential VOC emissions from each such storage vessel shall be calculated within 30 days of the removal or non-compliant operations of the VRU system.

[40 CFR 60.5365(e)]

c) Operational Restrictions

- (1) Organic vapors released from the stabilized condensate storage tanks shall be vented and controlled at all times by either the VRU or by the low pressure flare.
- (2) The permittee shall operate and shall maintain the VRU and flare at all times in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modification deemed necessary by the permittee.
- (3) In the event the VRU or flare is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- (4) The permittee shall install and operate a system to automatically close the shutdown valves for the wells when the VRU and flares are both not operating in order to prevent the tank(s) from uncontrolled venting. This system shall continuously monitor the tank pressure, the liquid level, or both.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the throughput of the emissions unit, in bbl/d.
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the VRU and flare, 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 VRU and flare 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 VRU and flare 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 perform daily inspections, each day that an operator is at the facility and when the facility is in operation, for indications of releases from the pressure relief valves, and any olfactory, visual or auditory indications of equipment leaks. The positive indication of a release or a leak shall be noted in an operations log, along with the following information:
  - a. the name of the inspector;
  - b. the date and time inspected;
  - c. the identification of the pressure relief valve that released and/or piece of equipment that leaked;
  - d. the estimated or calculated duration of the pressure relief valve release and/or equipment leak and the estimated emission totals; and
- (6) any corrective actions taken to minimize or eliminate the release or leak.
- (7) The permittee shall document each inspection (periodic and annual) of the VRU and flare 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 agency upon request.

- (8) The permittee shall maintain records that document any time periods when the VRU or flare was not in service when the emissions unit(s) was/were in operation, as well as a record of all operations during which the VRU or flare 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.
- (9) The permittee shall maintain records of the tank pressure, liquid level, or both as required in c)(4). 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.

- (10) The permittee shall maintain the following records documenting the facility's determination of emissions from each storage vessel:

a.	CFR 60.5365(e)	The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput determined for a 30-day period of production prior to 10/15/13 for Group 1 storage vessels and prior to 4/15/14 or 30 days after startup for Group 2 storage vessels
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These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

- (11) The permittee shall properly install, operate, and maintain a thermocouple or equivalent device to monitor and record the presence of a flame when 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.
- (12) The permittee shall collect a pressurized condensate sample within 30 days of the first restart of the facility since the January 2015 shutdown and perform a detailed gas analysis in order to determine the VOC and hazardous air pollutant (HAP) composition. This sampling shall be repeated on a semiannual basis.
- (13) The permittee shall record the following information on a monthly basis:
- a. The number of valve shutdowns from the inlet separator that result from the condensate tank pressure or condensate liquid level reaching the value established in c)(3), including the date and time, duration and reason; and
  - b. The number of uncontrolled releases to the atmosphere that result from the condensate tank pressure or condensate liquid level exceeding the values established in c)(3). Details of these releases shall be immediately provided to the Ohio EPA per OAC rule 3745-15-06(B).
- (14) The permittee shall properly install, operate, and maintain a continuous pressure monitor and recorder that measure and record the pressure and/or the liquid level within the condensate tank when the emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure/liquid level on a continuous basis. 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 5 years. These records can be kept

electronically, provided they can be made available to the appropriate Ohio EPA District Office or local air agency.

- (15) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measure and record the temperature of the flare stack 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 5 years. These records can be kept electronically, provided they can be made available to the appropriate Ohio EPA District Office or local air agency.
- (16) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the VRU and low pressure flare, 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.

e) Reporting Requirements

- (1) See B.3. - 4.
- (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.

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 and operate a VRU and flare with  $\geq 98\%$  VOC overall control efficiency.  
  
Applicable Compliance Method:  
  
Compliance shall be demonstrated by installing and operating a VRU with engineering design efficiency and a flare with manufacturer's design efficiency, both with  $\geq 98\%$  overall control efficiency for VOC emissions as specified in the permittee's application.



b. Emissions Limitation:

VOC emissions shall not exceed 1.87 TPY total.

Applicable Compliance Method:

The permittee may determine the annual total VOC emissions using the appropriate methods identified in 40 CFR 60.5360 - 5430 and/or E&P Tank model. Inputs to the model shall be representative of actual operating conditions of the facility operations.

Potential VOC emissions estimates shall be based on the maximum production rate(s), (375 bbl/day); with the worst case pollutant concentrations from representative condensate or produced water.

g) Miscellaneous Requirements

- (1) Any amendment to Part 60, Subpart OOOO shall supersede the Subpart OOOO compliance limitations and/or options contained in this permit.