



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

5/3/2016

Certified Mail

Evan Foster  
Ascent Resources - Utica LLC - Conotton Well Pad  
PO Box 13678  
Oklahoma City, OK 73113

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	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: 0634005119  
Permit Number: P0119185  
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**
- **What should you do if you notice a spill or environmental emergency?**

**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.

## **What should you do if you notice a spill or environmental emergency?**

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, 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  
Ascent Resources - Utica LLC - Conotton Well Pad**

Facility ID:	0634005119
Permit Number:	P0119185
Permit Type:	Initial Installation
Issued:	5/3/2016
Effective:	5/3/2016
Expiration:	9/17/2025





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Ascent Resources - Utica LLC - Conotton Well Pad

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**Final Permit-to-Install and Operate**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
**Facility ID:** 0634005119  
**Effective Date:** 5/3/2016

## Authorization

Facility ID: 0634005119  
Application Number(s): A0053502, A0053592, A0054039  
Permit Number: P0119185  
Permit Description: Initial installation of a four (4)-wellhead oil and gas well-site, including two (2) gas compressor engines, condensate and produced water storage and loading, equipment leaks, blowdowns, and flare as control.  
Permit Type: Initial Installation  
Permit Fee: \$2,700.00  
Issue Date: 5/3/2016  
Effective Date: 5/3/2016  
Expiration Date: 9/17/2025  
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Ascent Resources - Utica LLC - Conotton Well Pad  
35201 Kennedy Ridge Rd  
Flushing, OH 43977

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

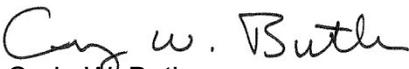
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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



## Authorization (continued)

Permit Number: P0119185

Permit Description: Initial installation of a four (4)-wellhead oil and gas well-site, including two (2) gas compressor engines, condensate and produced water storage and loading, equipment leaks, blowdowns, and flare as control.

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>J001</b>                                 |
| Company Equipment ID:             | Condensate and Produced Water Truck Loading |
| Superseded Permit Number:         |   |
| General Permit Category and Type: | Not Applicable                              |
| <b>Emissions Unit ID:</b>         | <b>P003</b>                                 |
| Company Equipment ID:             | Pigging and blowdowns                       |
| Superseded Permit Number:         |   |
| General Permit Category and Type: | Not Applicable                              |
| <b>Emissions Unit ID:</b>         | <b>P004</b>                                 |
| Company Equipment ID:             | Flare/Combustor                             |
| Superseded Permit Number:         |   |
| General Permit Category and Type: | Not Applicable                              |
| <b>Emissions Unit ID:</b>         | <b>P801</b>                                 |
| Company Equipment ID:             | Equipment / Pipeline Leaks                  |
| Superseded Permit Number:         |   |
| General Permit Category and Type: | Not Applicable                              |
| <b>Emissions Unit ID:</b>         | <b>T001</b>                                 |
| Company Equipment ID:             | Condensate Storage Tanks                    |
| Superseded Permit Number:         |   |
| General Permit Category and Type: | Not Applicable                              |

**Group Name: 400 HP natural gas fired engines**

<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	Waukesha VGF F18GSI Engine 400 hp
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	Waukesha VGF F18GSI Gas Engine 400 hp
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
**Facility ID:** 0634005119  
**Effective Date:** 5/3/2016

## **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**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
**Facility ID:** 0634005119  
**Effective Date:** 5/3/2016

## **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), is not necessary if/when the maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, from all sources in the project, is less than 1.0 ton per year (or are subject to a standard under 40 CFR Part 63). 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. 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. The applicant should provide all input data used, the basis for each input value used, and the results provided by the program.
4. 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.
5. Specific emissions units contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ (P001-P002). The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website: <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office of local air agency.



**Final Permit-to-Install and Operate**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
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6. 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>.



**Final Permit-to-Install and Operate**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
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**Effective Date:** 5/3/2016

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



**1. J001, Condensate and Produced Water Truck Loading**

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

Condensate(maximum annual throughput of 61,320,000 gallons) and produced water (maximum annual throughput of 29,433,600 gallons) truck loading rack.All loading of trucks equipped with submerged fill and vented to a vapor recovery line with a capture efficiency of 70% which will be routed to emissions unit P004; the remaining 30% of emissions are fugitive emissions accounted for in J001.

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) and ORC 3704.03(T)	Volatile Organic Compounds (VOC) emissions shall not exceed 4.39 ton per month averaged over a rolling 12-month period.

(2) Additional Terms and Conditions

a. All loading of materials through this emissions unit shall be accomplished through the use of a top load, fully submerged filling system and vented to a vapor recovery line and flare, Emissions unit P004. See permit for emissions unit P004 flare requirements.

c) Operational Restrictions

- (1) The total annual throughput rate for all liquid material types combined for this emissions unit shall not exceed 61,320,000 gallons per year of condensate and 29,433,600 gallons of produced water per year based upon a rolling 12-month summation of the throughput rates.
- (2) The delivery vessel and flash/storage vessel hatches shall be verified by the driver/operator to be in good condition, closed and properly seated at all times during the loading of the delivery vessel. Prior to connecting the transfer line(s) from the tank to the tank truck, the permittee shall inspect all fittings, valves, gaskets and fasteners that will be used during the transfer to ensure they are in proper condition (i.e., not corroded, torn, worn, stripped or otherwise damaged) and will result in vapor tight connections.
- (3) During the loading of materials from the tank to the tank truck, the permittee shall continually monitor the transfer equipment, the tank and the tank truck for any leaks through visual, olfactory, or other observations. If any leak is detected, loading of the materials shall cease until the leaking component has been repaired.
- (4) The permittee shall not permit materials to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.
- (5) The permittee shall install and operate vapor recovery line for the control of VOC emissions whenever this emissions unit is in operation and shall maintain vapor recovery line in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (6) In the event the vapor recovery line is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the vapor recovery unit shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the throughput of each type of liquid material, in gallons;
  - b. the rolling, 12-month summation of the throughput for each liquid material type, in gallons;
  - c. the rolling, 12-month summation of the throughput for all liquid material types combined, in gallons;
  - d. each occurrence where the truck was not vented to the add-on control and/or hatches were not properly closed;

- e. the estimated time and material throughput, in gallons, of each occurrence in “d.” and “e.”;
  - f. for transfer operations, the permittee shall maintain a record of the following information:
    - i. the date any leak was detected;
    - ii. the findings of the inspection for the leak, which shall indicate the location, nature, and severity of the leak;
    - iii. the leak detection method;
    - iv. the corrective action(s) taken to repair each leak and the date of final repair; and
    - v. the inspector’s name and signature.
- (2) The permittee shall maintain documentation of the manufacturer’s recommendations, instructions, or operating manuals for the vapor recovery line, 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 vapor recovery line 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 vapor recovery line 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 vapor recovery line 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 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 add-on control was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which add-on control 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.
- 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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emissions Limitation:

VOC emissions from condensate and produced water truck loading losses shall not exceed 4.39 tons per month averaged over a rolling 12-month period.

Applicable Compliance Method:

The annual emissions limitation was determined based on worst case scenario operation using the following calculations, taking into account that the allowable was based on a maximum annual throughput of 61,320,000 gallons per year for condensate and 29,433,600 gallons per year produced water loading.

**Condensate and Produced Water truck loading loss:**

The loading loss factor was derived using AP-42, Section 5.2, "Loading Loss Equation." The loading loss shall be determined by the following calculation:

$$L_L = 12.46 \times (SPM/T)$$

Where:

S = saturation factor = 0.6 unit less for submerged loading (AP-42 Chapter 5.2-1)



$P$  = true vapor pressure = 6.02 psia, based on product information

$M$  = molecular weight of vapors = 66 lb/lb-mole, based on product information

$T$  = temperature of bulk liquid = 525.67 °R, based on engineering estimate

Maximum condensate throughput = as recorded in c)(1)a. above

0.70 = capture efficiency of system in decimal form, based on permittee's application

Annual uncontrolled emissions rate = Condensate loading lossx (maximum annual condensate throughput in gallons) = 5.7 lb/1,000 gal x (61,320,000 gal) / (2,000 lbs/1 ton) = 174.76 tons/year uncontrolled condensate VOC

Annual uncontrolled emissions rate = Produced water loading lossx (maximum annual produced water throughput in gallons) = 5.7 lb/1,000 gal x (29,433,600 gal) / (2,000 lbs/1 ton) = 83.89 tons/year uncontrolled produced water VOC

Fugitive condensate VOC emissions= ton/year uncontrolled VOC x (1 – capture efficiency) = 174.76 uncontrolled VOC x (1 – 0.70) = 52.47 tons/year condensate VOC\* 1 year/12 months = 4.37 tons/month

Fugitive produced water VOC emissions = ton/year uncontrolled VOC x (1 – capture efficiency) = 83.89 uncontrolled VOC x (1 – 0.70) = 25.2 tons/year produced water VOC x 0.01 (1% loss for produced water) = 0.25 tons/year produced water VOC\* 1 year/12 months = 0.02 tons/month

Total VOC emissions = fugitive condensate VOC + fugitive produced water VOC=52.72 tons/year \* 1 year/12 months= 4.39 tons/month as a rolling,12-month average

g) Miscellaneous Requirements

(1) None.

**2. Emissions Unit Group 400 HP natural gas fired engines: P001, P002**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P001	Waukesha VGF F18GSI Gas Engines 400 hp
P002	Waukesha VGF F18GSI Gas Engines 400 hp

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

Waukesha VGF F18GSI 400 HP 4-stroke rich burn, natural gas-fired engines equipped with non-selective catalyst reduction (NSCR) technology to control NO<sub>x</sub> emissions at 94% and CO emissions at 75% manufactured in 2012.

- 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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3), June 30, 2008	Install an engine that was designed to meet 1.0 grams NO <sub>x</sub> /hp-hr  Install an engine that was designed to meet 2.0 grams CO/HP-hr  Install an engine that was designed to meet 0.14 g VOC/hp-hr.  Particulate emissions (PE) emissions shall not exceed 0.003 tons per month averaged over a 12-month, rolling period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. below.
b.	<p>40 CFR Part 60, Subpart JJJJ</p> <p>In accordance with 40 CFR 60.4230, this engine is a Stationary Spark Ignition (SI) Internal Combustion Engine (ICE) that commenced construction after June 12, 2006 and was manufactured after July 1, 2008.</p>	<p>Emissions shall not exceed:</p> <p>VOC emissions shall not exceed 0.7 g/hp-hr and 60 ppmvd at 15% O<sub>2</sub>.</p> <p>The emissions limitation specified by this rule for VOC is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3), until U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05.</p> <p>The emissions limitation specified by this rule for NO<sub>x</sub> and CO is equivalent to the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(E).</p>
c.	<p>OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008</p>	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-05(A)(3) do not apply to the VOC or PE emissions from this air contaminant source since the potential to emit is less than 10 tons/year.</p> <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO<sub>x</sub> and CO emissions from this air contaminant source since the PTE is less than 10 tons/year, taking into account the voluntary restrictions from OAC rule 3745-31-05(E).</p> <p>See b)(2)b. below.</p>
d.	<p>OAC rule 3745-31-05(E) June 30, 2008</p>	<p>Emissions shall not exceed:</p> <p>1.0 g NO<sub>x</sub>/hp-hr or 82 ppmvd at 15% O<sub>2</sub>          3.862 tons of NO<sub>x</sub> per year</p> <p>2.0 g CO/hp-hr or 270 ppmvd at 15% O<sub>2</sub>          7.725 tons of CO per year ; and</p> <p>Install and operate an engine with an NSCR or equivalent control to reduce NO<sub>x</sub> emissions by 94% and CO emissions by 75%.</p>
e.	<p>OAC rule 3745-17-11(B)(5)</p>	<p>Particulate Emissions (PE) shall not exceed</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.310lb/MMBtu.
f.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
g.	OAC rule 3745-18-06(G)	Pursuant to OAC rule 3745-18-06(A), this stationary internal combustion engine is exempt from the sulfur dioxide (SO <sub>2</sub> ) emission limitation specified by this rule during any calendar day in which natural gas is the only fuel burned.
h.	40 CFR Part 60, Subpart A	Table 3 to Subpart JJJJ of 40 CFR Part 60 – “Applicability of General Provisions to Subpart IIII” identifies the parts of the General Provisions in 40 CFR Part 60.1 – 19 that apply.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio 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) Operational Restrictions

- (1) The permittee shall only burn natural gas in this emissions unit.
- (2) The permittee shall install and operate the engines with a catalyst for control of NO<sub>x</sub> and CO emissions and shall maintain the engine and catalyst control in accordance with the manufacturer’s recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subparts JJJJ, 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(g)	Maintain and operate air to fuel ratio (AFR) with three-way catalyst/non-selective catalytic reduction.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, operating manuals for the engine and catalyst, 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 engine's catalyst 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.
- (3) 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 catalyst 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 engine catalyst 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.



- (5) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4243(b)(2)(i), and 60.4245(a)	Keep maintenance plan and records of conducted maintenance, and all notifications documentation that the engine meets the emissions standards
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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.

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:

PE emissions shall not exceed 0.003 ton per month averaged over a 12-month, rolling period.

Applicable Compliance Method:

The emissions limitation was derived by the following calculation based upon AP-42 Table 3.2-3 emission factor:

$$\begin{aligned}
 PE &= 0.00950 \text{ lb/MMBtu} \times 8760 \text{ hr/year} \times 1 \text{ ton}/2000 \text{ lbs} \times 1 \text{ year}/12 \text{ months} \\
 &= 0.003 \text{ tonper month averaged over a 12-month rolling period.}
 \end{aligned}$$

b. Emissions Limitation:

NOx emissions shall not exceed 1.0 grams NOx/hp-hr or 82 ppmvd at 15% O<sub>2</sub>

Applicable Compliance Method:

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

c. Emissions Limitation:



CO emissions shall not exceed 2.0 grams CO/hp-hr or 270 ppmvd at 15% O<sub>2</sub>

Applicable Compliance Method:

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

- d. Emissions Limitation:

VOC emissions shall not exceed 0.7 grams VOC/hp-hr or 60 ppmvd at 15% O<sub>2</sub>

Applicable Compliance Method:

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

- e. Emissions Limitation:

Emissions shall not exceed 3.862 tons of NO<sub>x</sub> per year.

Applicable Compliance Method:

$$\begin{aligned} \text{NO}_x (\text{Tons/year}) &= \text{hp of engine} \times \text{NO}_x \text{ emission factor (16.0 g/bhp-hr)} \times \\ &\quad 1\text{lb}/454 \text{ g} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \\ &\quad \text{lbs} \times (1 - 94\% \text{ control efficiency}) \\ &= 3.862 \text{ tons/year} \end{aligned}$$

- f. Emissions Limitation:

Emissions shall not exceed 7.725 tons of CO per year.

Applicable Compliance Method:

Compliance is demonstrated by the following calculation:

$$\begin{aligned} \text{CO}(\text{Tons/year}) &= \text{hp of engine} \times \text{CO emission factor (8.00 g/bhp-hr)} \times \\ &\quad 1\text{lb}/454 \text{ g} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \\ &\quad \text{lbs} \times (1 - 75\% \text{ control efficiency}) \\ &= 7.725 \text{ tons/year} \end{aligned}$$

- g. Emissions Limitation:

Emissions shall not exceed 0.539 tons of VOC per year.

Applicable Compliance Method:

Compliance is demonstrated by the following calculation:



$$\begin{aligned}
 \text{VOC (Tons/year)} &= \text{hp of engine} \times \text{VOC emission factor (0.14 g/bhp-hr)} \times \\
 &\quad 11\text{b}/454 \text{ g} \times 8,760 \text{ hours of operation per year} \times 1 \text{ ton}/2,000 \\
 &\quad \text{lbs} \\
 &= 0.539 \text{ tons per year}
 \end{aligned}$$

h. Emissions Limitation:

PE shall not exceed 0.310 pound/MMBtu actual heat input.

Applicable Compliance Method:

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, Southeast District Office.

i. 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) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4244	Procedures for performance testing
60.4243(f) and (b)(2)(i)	Initial performance test

When purchasing a non-certified engine, the permittee shall demonstrate compliance with the emission standards specified in 40 CFR 60.4233(e) and according to the requirements specified in 40 CFR 60.4244, as applicable.

The permittee has chosen to demonstrate compliance with the emission standards specified in §60.4233(e) and OAC rule 3745-31-05(A)(3) by performing a stack test, and therefore the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the procedures specified in 40 CFR 60.4244; 40 CFR Part 60, Subpart JJJJ Table 2; and the following requirements:

- a. An initial performance test shall be performed to demonstrate compliance with the mass emissions limitations and design efficiencies in f)(1)b.-d. of this permit 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.

- b. If the stationary internal combustion engine is rebuilt, or undergoes major repair or maintenance the permittee shall conduct subsequent performance test.
- c. 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.
- d. 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).
- e. 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.
- f. 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.

g) Miscellaneous Requirements

- (1) None



**3. P003, Blowdowns**

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

Equipment maintenance and blowdowns with a maximum gas release of 100 Mcf/year.

- 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.
      - b. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3), as effective June 30, 2008	Total volatile organic compound (VOC) emissions (including breathing losses, working losses, and flashing losses) shall not exceed 0.51 ton per month averaged over a rolling twelve-month period.  See b)(2)(a) below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the PTE is less than 10 tons/year.  See b)(2)b. below.



- (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 SIP.
- c) Operational Restrictions
  - (1) The permittee shall minimize the frequency and size of blowdowns by conducting routine operation and maintenance activities in a manner consistent with safety and good air pollution control practices.
- d) Monitoring and/or Recordkeeping Requirements
  - a. The permittee shall maintain the following records on a monthly basis:
    - b. The date, number, and type of each blowdown event;
    - c. Total volume of gas emitted from each blowdown event;
    - d. Total volume of gas emitted from all blowdown events as a rolling, 12-month average;
    - e. Gas density derived using actual stream sampling data (e.g., gas chromatography); and,
    - f. Total VOC emissions per month as a rolling, 12-month average;
- (e) Reporting Requirements
  - (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 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:



**Final Permit-to-Install and Operate**  
Ascent Resources - Utica LLC - Conotton Well Pad  
**Permit Number:** P0119185  
**Facility ID:** 0634005119  
**Effective Date:** 5/3/2016



a. Emission Limitation:

VOC emissions shall not exceed 0.51 tons per month as a rolling 12-month average.

Applicable Compliance Method:

The VOC emissions limitation was derived by the calculation below using the inputs provided in the permittee's application. Ongoing compliance with the VOC emissions limitation shall be determined by the calculation below and the records as required in d)(1) of this permit.

**Blowdown Emissions (Facility and Interconnect):**

$$\frac{V \text{ scf}}{\text{yr}} * \frac{D \text{ lb}}{\text{scf}} * VOC * \frac{\text{ton}}{2,000 \text{ lb}} * \frac{\text{yr}}{12 \text{ m rolling}} \leq 0.51 \frac{\text{ton}}{12 \text{ m rolling}}$$

Where: V = annual gas release

D = gas density, derived from gas sampling

VOC = VOC fraction

2,000 = conversion factor

12 = conversion factor

g) Miscellaneous Requirements

a. None.

**4. P004, Flare/Combustor**

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

Enclosed Combustor 5.57 MMBtu/hr with a gas flow rate of 5.46 MCF/hr and 98% destruction efficiency to control emissions from emissions units J001 and T001.

- 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	<p>Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.14 ton per month averaged over a rolling 12-month period.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.75 tons per month averaged over a rolling 12-month period.</p> <p>VOC emissions shall not exceed 0.31 ton per month averaged over a 12-month rolling period.</p> <p>See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO <sub>x</sub> and CO emissions from this air contaminant source since the PTE is less than 10 TPY.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC emissions from this air contaminant source since the calculated annual emissions is less than 10 tons/year 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 6/30/2008	Emissions shall not exceed 3.67 tons of VOC per year.

(2) Additional Terms and Conditions

- a. This BAT emissions limit applies until US EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) into the Ohio SIP.
- b. These requirements apply once US EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) into the Ohio SIP.

c) Operational Restrictions

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the amount of gas, routed to the flare in mcf/month.
- (2) 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.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the 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.
- (4) The permittee shall conduct periodic inspections of the 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 Ohio EPA upon request.

- (5) In addition to the recommended periodic inspections, not less than once each calendar year, the permittee shall conduct a comprehensive inspection of the 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.
- (6) The permittee shall document each inspection (periodic and annual) of the 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 upon request.

- (7) The permittee shall maintain records that document any time periods when the 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 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.

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 permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.



f) Testing Requirements

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

a. Emissions Limitation:

NO<sub>x</sub> emissions shall not exceed 0.14 tons per month averaged over a rolling 12-month period.

Applicable Compliance Method:

The emissions limitation was derived by the following worst case calculations based on the emissions factors and other information in the permittee's application:

$$\frac{0.068 \text{ lb}}{\text{MMBtu}} * \frac{5.57 \text{ MMBtu}}{\text{hr}} * \frac{8760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2000 \text{ lbs}} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.14 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

- 0.068 = emissions factor from AP-42 Table 13.5-1
- 5.57 = maximum heat input capacity of emissions unit
- 8,760 = operating hours
- 2,000 = conversion factor
- 12 = conversion factor

b. Emissions Limitation:

Applicable Compliance Method:

CO emissions shall not exceed 0.75 tons per month averaged over a rolling 12 month period.

Applicable Compliance Method:

The emissions limitation was derived by the following worst case calculations based on the emissions factors and other information in the permittee's application:

$$\frac{0.370 \text{ lb}}{\text{MMBtu}} * \frac{5.57 \text{ MMBtu}}{\text{hr}} * \frac{8760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2000 \text{ lbs}} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.75 \frac{\text{ton}}{\text{m rolling 12}}$$



Where:

0.370 = emissions factor from AP-42 Table 13.5-1  
5.57 = maximum heat input capacity of emissions unit  
8,760 = operating hours  
2,000 = conversion factor  
12 = conversion factor

c. Emissions Limitation:

VOC emissions shall not exceed 0.31 tons per month averaged over a rolling 12-month period.

Applicable Compliance Method:

The emissions limitation was derived by the following equation and from information provided in the permittees application.

Tanks (T001):

Condensate total annual VOC emissions (tpy) = [(breathing losses (lbs) + working losses (lbs))/2000) + flash losses (tpy)] x (enclosed flare capture efficiency (%)) x (# condensate tanks)

= [(675.74lb + 11,739.79lb)/2000lb] x [0.97] x 10  
=60.2 tons per year routed to combustor

Produced water total annual VOC emissions (tpy)= [(breathing losses (lbs) + working losses (lbs))/2000) + flash losses (tpy)] x [1- enclosed flare capture efficiency (%)] x(# produced water tanks) x 1

= [(675.74lb +16,097.44)/2000]x[enclosed flare capture efficiency (%)]x 3 x.01  
=0.244 tpy routed to combustor

Truck Loading (J001)

Annual VOC emissions condensate loading  
= uncontrolled annual VOC emissions (tpy) x (capture efficiency (%))  
=174.91 tpy x (1-.70)  
=122.43 tpy routed to combustor

Annual VOC emissions produced water loading  
= uncontrolled annual VOC emissions (tpy) x (1- capture efficiency (%))  
= 0.84 tpy x (.70) x (1-.98)  
=0.588 tpy routed to combustor



Total VOC from tanks and loading routed to combustor

Total VOC = [(condensate VOC from tanks) + (produced water VOC from tanks) + (condensate loading VOC) + (produced water loading VOC) x (1- destruction efficiency (%))]

$$\begin{aligned} &= (60.2 \text{ tpy}) + (0.244 \text{ tpy}) + (122.43 \text{ tpy}) + (0.588 \text{ tpy}) \\ &= 183.46 \text{ tpy} \times (1-.98) \\ &= 3.67 \text{ tpy} \end{aligned}$$



**5. P801, Equipment / Pipeline Leaks**

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

Ancillary equipment and associated equipment: compressors, pumps, piping, pneumatic controllers, gas-water/condensate/oil separators, etc. Equipment/pipeline leaks from valves, flanges, pressure relief devices, open end valves or lines, and pump and compressor seals in VOC or wet gas service.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	Develop and implement a site-specific leak detection and repair program for ancillary equipment as described in paragraph c).

- (2) Additional Terms and Conditions
  - a. none

c) Operational Restrictions

(1) Ancillary Equipment Leak Detection and Repair Program

The permittee shall develop and implement a leak detection and repair program designed to monitor and repair leaks from ancillary equipment covered by this permit, including each pump, compressor, pressure relief device, connector, valve, flange, vent, cover, any bypass in the closed vent system, and each storage vessel. This program shall meet the following requirements:

- a. Leaks shall be detected by the use of either a "Forward Looking Infra-Red" (FLIR) camera or an analyzer meeting U.S. EPA Method 21 of 40 CFR Part 60, Appendix A.
- b. An initial monitoring shall be completed within 30 days of startup and quarterly thereafter for a period of four consecutive quarters (1 year).
- c. If following the initial four consecutive quarters, less than or equal to 2.0% of the ancillary equipment are determined to be leaking during the most recent quarterly monitoring event, then the frequency of monitoring can be reduced to semi-annual.
- d. If following two consecutive semi-annual periods, less than 2.0% of the ancillary equipment are determined to be leaking during the most recent semi-annual monitoring event, then the frequency of the monitoring can be reduced to annual.
- e. If more than or equal to 2.0% of the ancillary equipment are determined to be leaking during any one of the semi-annual or annual monitoring events, then the frequency of monitoring shall be returned to quarterly.
- f. The program shall require the first attempt at repair within five (5) calendar days of determining a leak.
- g. The program shall require that the leaking component is repaired within 30 calendar days after the leak is detected.
- h. The program shall allow for the delayed repair of a leaking component following the language found in 40 CFR 60.5416(c)(5).
- i. The program shall following the Monitoring and Record Keeping requirements described in paragraph 5.d) of this permit.

- (2) In the event that a leak or defect is detected in the cover, closed vent system, process equipment, or control device, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 30 calendar days after the leak is detected as allowed in 40 CFR 60.5416(c)(4). Any delay of repair of a leak or defect shall meet the requirements of 40 CFR 60.5416(c)(5).

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

(1) **Ancillary Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing FLIR Cameras**

- a. Leaks shall be determined by visually observing each ancillary component through the FLIR camera to determine if leaks are visible.
- b. The following information shall be recorded during each leak inspection:
  - i. the date the inspection was conducted;
  - ii. the name of the employee conducting the leak check;
  - iii. the identification of any component that was determined to be leaking;
  - iv. the date the first attempt to repair the component was made;
  - v. the reason the repair was delayed following the language found in 40 CFR 60.5416(c)(5);
  - vi. the date the component was repaired and determined to no longer be leaking;
  - vii. the total number of components that are leaking; and
  - viii. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary components capable of developing a leak, and multiplied by 100.
- c. The permittee shall maintain records that demonstrate the FLIR camera is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.
- d. The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

(2) **Ancillary Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing a Method 21 Analyzer**

- a. Leaks shall be measured by utilizing U.S. EPA Method 21 (40 CFR Part 60, Appendix A). All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm or 10,000 ppm (as applicable) for determining compliance.
- b. A component is considered to be leaking if the instrument reading is equal to or greater than:



pressure relief device in gas/vapor service	10,000 ppm
pressure relief device in light liquid service	10,000 ppm
pumps in light liquid service	10,000 ppm
compressor	500 ppm
sampling connection system*	*
open ended valves or lines**	**
valves in gas/vapor and light liquid service	10,000 ppm
closed vent system	500 ppm
connectors	10,000 ppm
all other ancillary and associated equipment in VOC service	10,000 ppm

\* must be equipped with a closed-purge, closed-loop, or closed-vent system

\*\* must be equipped with a cap, blind flange, plug, or a second valve

- c. The following information shall be recorded during each leak inspection:
- i. the date the inspection was conducted;
  - ii. the name of the employee conducting the leak check;
  - iii. the identification of any component that was determined to be leaking (company ID and component type (flange, pump, etc.);
  - iv. the date the first attempt to repair the component was made;
  - v. the reason the repair was delayed following the language found in 40 CFR 60.5416(c)(5);
  - vi. the date the component was repaired and determined to no longer be leaking;
  - vii. the total number of components that are leaking; and
  - viii. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary components capable of developing a leak, and multiplied by 100.

- d. The permittee shall maintain records that demonstrate the Method 21 analyzer is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.
  - e. In order to calibrate the analyzer, the following calibration gases shall be used:
    - i. zero air, which consists of less than 10 ppm of hydrocarbon in air; and
    - ii. a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.
  - f. The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.
- (3) The permittee shall 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
  - e. any corrective actions taken to minimize or eliminate the release or leak.
- 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) Supplement to the PER for the Ancillary Equipment Leak Detection and Repair Program
- For each inspection that occurred during the year, the permittee shall submit the following information with the annual PER from data collected by the ancillary equipment leak detection and repair program:



- a. the date of the inspection;
  - b. the number of components determined to be leaking;
  - c. the company ID and component type (flange, pump, etc.) of each leaking component;
  - d. the total number of components at the site;
  - e. the percent of components determined to be leaking;
  - f. a list of all components that have not been repaired due to a delay of repair and the reason for the delay; and
  - g. a notification indicating if the permittee has changed future inspection frequencies based on the percent of components leaking.
- 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) None.
- g) Miscellaneous Requirements
- (1) None.

**6. T001, 500 bbl Condensate and Produced Water Storage Tanks**

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

10 Condensate and 3 Produced Water, 21,000 gallon, storage tanks with a maximum annual throughput of 61,320,000 and 29,433,600 gallons, respectively. Emissions are controlled by an enclosed combustor (emissions unit P004) with a 97% capture efficiency and 98% control efficiency.

- 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 an enclosed flare designed to achieve 97% capture efficiency and a minimum of 98% destruction efficiency of volatile organic (VOC) emissions.  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 less than 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	Emissions shall not exceed 1.91 tons of VOC per year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See c)(1) below.
d.	40 CFR Part 60, Subpart OOOO (60.5360-60.5430)  In accordance with 40 CFR, 60.5365(e), 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 taking into account the control requirements of b)(1)a. above, 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 to Subpart OOOO of 40 CFR Part 60 – Applicability of General Provisions to Subpart OOOO shows which part of the General Provisions in 40 CFR Part 60.1- 19 apply.

(2) Additional Terms and Conditions

- a. This BAT emissions limit applies until US EPA approves OAC rule 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 rule 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 prior to 4/15/14 or 30 days after startup for storage vessels installed after 4/12/13.

c) Operational Restrictions

- (1) Vapors from the produced water tanks shall be vented to and controlled at all times by a combustor (P004).
- (2) The permittee shall operate the combustor 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) The permittee shall install and operate a system to automatically close the shut-down valves for the produced water inlet line(s) to the storage tanks in order to prevent the tank(s) from uncontrolled venting. This system shall continuously monitor either tank pressure, liquid level, or both.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records for the tank contents and monthly and annual throughput (in gallons per month and as a rolling 12-month average).
- (2) The permittee shall collect a pressurized condensate sample within 30 days of startup of the facility 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.
- (3) 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 tank pressure or 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 tank pressure or 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).
- (4) The permittee shall properly install, operate, and maintain a continuous pressure monitor and recorder that measures and records the pressure and/or the liquid level within the 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.
- (5) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for 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.
- (6) The permittee shall maintain the following records documenting the facility's determination of emissions from each storage vessel:

a.	CFR 60.5365(e)	Potential VOC calculations
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e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization



section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 1.91 tons of VOC per year.

Applicable Compliance Method:

Annual emissions from breathing, working, and flashing losses from each storage vessel shall be calculated based on the maximum average daily throughput determined for a 30-day period of production, per NSPS Subpart OOOO.

Flashing losses shall be calculated using a generally accepted model or process simulation software program(s) and/or calculation methodology such as, but not limited to, E&P Tank, HYSIM, HYSIS, VMG, or ProMax, to calculate the VOC emissions.

Pressurized samples shall be taken after the separator and at the same time from the flash gas and condensate/oil lines for flash gas analyses; and the data from these lab analyses shall be used in the process simulation software to document emissions from flashing.

g) Miscellaneous Requirements

(1) None.