



1/15/2015

Nathan Wheldon  
 Utica Condensate Stabilization Facility  
 1515 Arapahoe Street  
 Suite 1600 - Tower 1  
 Denver, CO 80202-2137

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL  
 Facility ID: 0634005057  
 Permit Number: P0116809  
 Permit Type: Initial Installation  
 County: Harrison

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. 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 PTI 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)3858501 or the Office of Compliance Assistance and Pollution Prevention at (614)644-3469.

Sincerely,



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

Cc: U.S. EPA  
Ohio EPA-SEDO; Pennsylvania; West Virginia



**FINAL**

**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Utica Condensate Stabilization Facility

Facility ID:	0634005057
Permit Number:	P0116809
Permit Type:	Initial Installation
Issued:	1/15/2015
Effective:	1/15/2015





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Utica Condensate Stabilization Facility

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## Authorization

Facility ID: 0634005057  
Facility Description:  
Application Number(s): A0049832, A0051508, A0051543  
Permit Number: P0116809  
Permit Description: Initial installation permit for a condensate stabilization facility. Due to a support facility analysis conducted with the Utica Condensate Stabilization Facility and Midwest Terminals-- Utica (Facility ID: 0634005064), the site is considered Title V for VOC emissions.  
Permit Type: Initial Installation  
Permit Fee: \$4,850.00  
Issue Date: 1/15/2015  
Effective Date: 1/15/2015

This document constitutes issuance to:

Utica Condensate Stabilization Facility  
Mattern Rd and Toot Rd/Township  
Cadiz, OH 43907

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

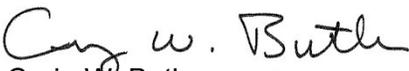
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0116809  
 Permit Description: Initial installation permit for a condensate stabilization facility. Due to a support facility analysis conducted with the Utica Condensate Stabilization Facility and Midwest Terminals-- Utica (Facility ID: 0634005064), the site is considered Title V for VOC emissions.

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

- Emissions Unit ID: J001**  
 Company Equipment ID: J001  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P004**  
 Company Equipment ID: P004  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P005**  
 Company Equipment ID: P005  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P801**  
 Company Equipment ID: P801  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: T005**  
 Company Equipment ID: T005  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: T006**  
 Company Equipment ID: T006  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable

**Group Name: 1953 HP Natural Gas Generator**

<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	P001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	P002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	P003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Group Name: 29.0 MMBtu/hr Hot Oil Heater**

<b>Emissions Unit ID:</b>	<b>B001</b>
Company Equipment ID:	B001
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B002</b>
Company Equipment ID:	B002
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

**Group Name: 5000 bbl Condensate Storage Tank**

<b>Emissions Unit ID:</b>	<b>T001</b>
Company Equipment ID:	T001
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>T002</b>
Company Equipment ID:	T002
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>T003</b>
Company Equipment ID:	T003
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>T004</b>
Company Equipment ID:	T004
Superseded Permit Number:	
General Permit Category andType:	Not Applicable



**Final Permit-to-Install**  
Utica Condensate Stabilization Facility  
**Permit Number:** P0116809  
**Facility ID:** 0634005057  
**Effective Date:** 1/15/2015

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



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

## **2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been



necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.
  - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions,



and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **6. Compliance Requirements**

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule



3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

## **8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.



## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## **10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

## **11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

## **13. Construction Compliance Certification**

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.



- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

**18. Risk Management Plans**

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

**19. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



**Final Permit-to-Install**  
Utica Condensate Stabilization Facility  
**Permit Number:** P0116809  
**Facility ID:** 0634005057  
**Effective Date:** 1/15/2015

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



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Specific emissions units contained in this permit are subject to 40 CFR Part 60, Subpart Kb (T001-T006), JJJJ (P001-P003), OOOO (P801), and VVa (P004, P005, P801). 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.
3. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR 63, Subpart ZZZZ. Although Ohio EPA has determined that an area source MACT (also known as the GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.
4. Pursuant to 40 CFR 60.5365(b)(1), each single continuous bleed natural-gas driven pneumatic controller operating at an affected natural gas processing plant under NSPS Subpart OOOO is subject to the following requirements:
  - a) Each pneumatic controller must have a bleed rate of zero (40 CFR 60.5390(b)(1));
  - b) Each pneumatic controller must be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller as required in § 60.5420(c)(4)(iv) (40 CFR 60.5390(b)(2));
  - c) Initial compliance for each pneumatic controller must be demonstrated by compliance with the requirements in (d)(1) through (6), as applicable (40 CFR 60.5390(d) and 60.5410(d));
  - d) Continuous compliance for each pneumatic controller must be demonstrated by compliance with the requirements in (d)(1) through (3), as applicable (40 CFR 60.5390(e) and 60.5415(d));
  - e) The initial notification required by 40 CFR 60.7(a)(1), (3) and (4) is not required (40 CFR 60.5420(a)(1));
  - f) Annual reports containing the information in 40 CFR 60.5420(b)(5) for each pneumatic controller must be submitted. The initial annual report must be received no later than 90 days after the end of the initial compliance period, and subsequent annual reports are due no later than the same date each year as the initial annual report (40 CFR 60.5420(b));
  - g) The records identified in 40 CFR 60.5420(c)(4) must be maintained for each pneumatic controller affected facility (40 CFR 60.5420(c)); and,
  - h) Table 3 of 40 CFR Part 60, Subpart OOOO identifies which parts of the General Provisions in 40 CFR Part 60, Subpart A applies.
5. Utica Condensation Stabilization Facility(Facility ID:0634005057) and Midwest Terminals—Utica, LLC (Facility ID: 0634005064) have been determined to be one facility for permitting purposes under 40 CFR Part 52.21, OAC Chapter 3745-31, and OAC Chapter 3745-77.



6. Risk Management Plans:

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



**Final Permit-to-Install**  
Utica Condensate Stabilization Facility  
**Permit Number:** P0116809  
**Facility ID:** 0634005057  
**Effective Date:** 1/15/2015

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



**1. J001, Truck Loading Operations**

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

Truck Loading Operations – Off-spec material will be loaded into tanker trucks from storage tanks T001-T004 and T006, and displaced vapors will be routed back to the VRU and ultimately combusted at the flare (P005) with a 98% destruction efficiency and 100% capture.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) 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 06/30/2008	Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of volatile organic compounds (VOC) emissions.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.

- (2) Additional Terms and Conditions
  - a. This Best Available Control (BAT) emissions limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(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 rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit for VOC is less than 10 tons/yr.



c) Operational Restrictions

- (1) The permittee shall minimize the amount of fugitive emissions of VOC by conducting all loading activities in a manner consistent with safety and good air pollution control practices by utilizing a VRU and a flare (P005) with a 98% destruction and 100% capture of VOC.
- (2) The permittee shall install and operate a VRU and a flare with a 98% destruction of VOC whenever this emissions unit is in operation and shall maintain the VRU and flare in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) In the event the VRU and flare are not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the VRU and flare shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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.
- (2) The permittee shall conduct periodic inspections of the VRU and the flare to determine whether they are 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 VRU and flare 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 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 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 maintain records that document any time periods when the VRU and flare were not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the system 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of 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 Standard:

Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions

Applicable Compliance Method:

Compliance is demonstrated by VRU system and flare manufacturer's design efficiency with 98% control efficiency and 100% capture.

g) Miscellaneous Requirements

- (1) None.



**2. P004, Plant Flare #1**

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

Plant Flare #1 – Callidus air-assisted flare with a maximum annual fuel use of 13,385 MMBtu that will be used to control emergency process releases. The flare will be equipped with natural gas pilot burners and a small amount of natural gas will be used to purge the flare header to avoid flash back and resulting over-pressurization.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) 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 06/30/2008	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 0.05 tonper month averaged over a twelve-month, rolling period.  Carbon monoxide (CO) emissions shall not exceed 0.05 tonper month averaged over a twelve-month, rolling period.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.0003 tonper month averaged over a twelve-month, rolling period.  Volatile organic compound (VOC) emissions shall not exceed 0.003 tonper month averaged over a twelve-month, rolling period.  Particulate emissions (PE) shall not exceed 0.003 ton per month averaged over a twelve-month, rolling period.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	40 CFR Part 60, Subparts A and VVa	See c)(1), d(1), and e(2) below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(40 CFR 60.18, 60.480a-489a)  [In accordance with 40 CFR 60.482-10a, this emissions unit consists of a flare and closed vent system used to control equipment leak emissions from process units subject to the standards of NSPS OOOO.]	

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and PE from this air contaminant source since the potential to emit for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and PE is less than 10 tons/yr.

c) Operational Restrictions

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

60.5400(a), 60.482-10a(d), 60.482-10a(m), and 60.18(e)	Operate closed vent systems and control devices used to comply with the provisions of 40 CFR 60, Subpart VVa at all times when emissions may be vented to them.
60.5400(a), 60.482-10a(d) and 60.18(c)(1)	Design and operate the flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
60.5400(a), 60.482-10a(d) and 60.18(c)(2)	Operate the flare with a flame present at all times.
60.5400(a), 60.482-10a(d), 60.18(c)(3), 60.18(c)(3)(ii), 60.18(c)(5), 60.18(f)(3), (4), and (6)	Adhere to the minimum net heating value of gas specified in 60.18(c)(3)ii) and maximum tip velocity specifications in 60.18(c)(5). Calculate heat content as specified in 60.18(f)(3). Calculate exit velocities as



	specified in 60.18(f)(4) and (6).*
60.5400(a) and 60.482-10a(g)	Repair detected leaks in the closed vent system.
60.5400(a) and 60.482-10a(h)	Allowances for delay of repair for leaks in closed vent systems.

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

d) Monitoring and/or Recordkeeping Requirements

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

60.5400(a), 60.482-10a(e), and 60.18(d)	Monitor the control device to ensure it is operated and maintained in conformance with its design.
60.5400(a), 60.482-10a(f), 60.485a(b)	Inspect each closed vent system, except as provided in 60.482-10a(i)-(k).
60.5400(a), 60.482-10a(d), 60.18(d), 60.18(f)(2)	Install, calibrate, operate and maintain the heat sensing monitoring device to monitor the presence of the flare pilot flame.
60.5400(a), 60.482-10a(l)	Maintain required records for all inspections of the closed vent systems.
60.5400(e), 60.486a(d)	Record the required information on design requirements and keep in a readily accessible location.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, OOOO, and VVa, including the following sections:

60.7(a)	Initial notification of the date construction of the affected facility commenced and the actual date of initial startup of the affected facility.
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60.5400(e), 60.487a(a)	Submit semiannual reports beginning 6 months after the initial startup date.
60.5400(e), 60.487a(b)-(c)	Include all required information in the initial semiannual report.  Include all required information in each subsequent semiannual report.

- (3) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of 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 Limitations:  
 NO<sub>x</sub> emissions shall not exceed 0.05 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The NO<sub>x</sub> emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned}
 \text{NO}_x \text{ (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{NO}_x \text{ emissions factor lb/mmscf} \times \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\
 &= (0.0013 \text{ mmscf/hr} \times 100 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \text{ Btu/scf} \\
 &= 0.15 \text{ lb/hr}
 \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0013 mmscf/hr, based on manufacturer specifications

NO<sub>x</sub> EF (pilot light) = 100 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.15 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.05 \text{ ton per month averaged over a twelve-month, rolling period}}$$



- b. Emissions Limitations:  
 CO emissions shall not exceed 0.05 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The CO emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned} \text{CO (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{CO emissions factor lb/mmscf} \times \\ &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.0013 \text{ mmscf/hr} \times 84 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\ &= \text{Btu/scf} \\ &= 0.13\text{lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0013 mmscf/hr, based on manufacturer specifications

CO EF (pilot light) = 84 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.13\text{lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.05 \text{ ton per month averaged over a twelve-month, rolling period}}$$

- c. Emissions Limitations:  
 SO<sub>2</sub> emissions shall not exceed 0.0003 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The SO<sub>2</sub> emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned} \text{SO}_2 \text{ (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{SO}_2 \text{ emissions factor lb/mmscf} \times \\ &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.0013 \text{ mmscf/hr} \times 0.6 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\ &= \text{Btu/scf} \\ &= 0.0009\text{lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0013 mmscf/hr, based on manufacturer specifications

SO<sub>2</sub> EF (pilot light) = 0.6 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3



Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.0009 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.0003 \text{ ton per month averaged over a twelve-month, rolling period}}$$

d. Emissions Limitations:

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

Applicable Compliance Method:

The VOC emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned} \text{VOC (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{VOC emissions factor lb/mmscf} \times \\ &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.0013 \text{ mmscf/hr} \times 5.5 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\ &= \text{Btu/scf} \\ &= 0.008 \text{ lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0013 mmscf/hr, based on manufacturer specifications

VOC EF (pilot light) = 5.5 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.008 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.003 \text{ ton per month averaged over a twelve-month, rolling period}}$$

e. Emissions Limitations:

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

Applicable Compliance Method:

The PE limitation was derived by the following calculations using the inputs provided in the permittee's application:



$$\begin{aligned}
 \text{PE (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{PE emissions factor lb/mmscf} \times \\
 &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\
 &= (0.0013 \text{ mmscf/hr} \times 5.7 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\
 &= \text{Btu/scf} \\
 &= 0.009 \text{ lb/hr}
 \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0013 mmscf/hr, based on manufacturer specifications

PE EF (pilot light) = 5.7 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.009 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.003 \text{ ton per month averaged over a twelve-month, rolling period}}$$

f. Emissions Limitations:

The flare shall be designed and operated with no visible emissions, except for a total of five minutes during any two consecutive hours.

Applicable Compliance Method:

Visible particulate emissions shall be determined according to USEPA Method 22. See f)(2).

(2) Performance testing shall be conducted as required in 40 CFR Part 60, Subpart A and OOOO pursuant to 40 CFR 60.18(f)(1), 60.5410(e)(5), and 60.5413(a)(1). The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 180 days after initial startup of such facility.
- b. The emissions testing shall be conducted to demonstrate compliance with the visible emission limitations for the flare in accordance with the requirements of 40 CFR 60.5413(a)(1).
- c. The following test method shall be employed to demonstrate compliance with the allowable emission rate: visible emissions - Method 22 of 40 CFR 60, Appendix A.
- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum



material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

- e. No later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emissions test(s).
- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of 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. P005, Plant Flare #2**

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

Flare #2 – John Zink air-assisted flare with a maximum annual fuel use of 1,046 MMBtu that will be used to control tank emissions (i.e., flashing, working, and breathing losses) and truck loading emissions. The flare will be equipped with natural gas pilot burners and a small amount of natural gas will be used to purge the flare header to avoid flash back and resulting over-pressurization.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) 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 06/30/2008	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 0.764 ton per month averaged over a twelve-month, rolling period.  Carbon monoxide (CO) emissions shall not exceed 3.024 ton per month averaged over a twelve-month, rolling period.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.0026 ton per month averaged over a twelve-month, rolling period.  Particulate emissions (PE) shall not exceed 0.033 ton per month averaged over a twelve-month, rolling period.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	OAC rule 3745-31-05(A)(3), as effective 06/30/2008	Volatile organic compound (VOC) emissions shall not exceed 3.83 ton per month averaged over a twelve-month, rolling period.
d.	40 CFR Part 60, Subparts A and	See c)(1), d(1), and e(2) below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	VVa (40 CFR 60.18, 60.480a-489a)  [In accordance with 40 CFR 60.482-10a, this emissions unit consists of a flare and closed vent system used to control equipment leak emissions from process units subject to the standards of NSPS OOOO.]	

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO<sub>x</sub>, SO<sub>2</sub>, and PE from this air contaminant source since the potential to emit for NO<sub>x</sub>, SO<sub>2</sub>, and PE is less than 10 tons/yr.

c) Operational Restrictions

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

60.5400(a), 60.482-10a(d), 60.482-10a(m), and 60.18(e)	Operate closed vent systems and control devices used to comply with the provisions of 40 CFR 60, Subpart VVa at all times when emissions may be vented to them.
60.5400(a), 60.482-10a(d) and 60.18(c)(1)	Design and operate the flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
60.5400(a), 60.482-10a(d) and 60.18(c)(2)	Operate the flare with a flame present at all times.
60.5400(a), 60.482-10a(d), 60.18(c)(3), 60.18(c)(3)(ii), 60.18(c)(5), 60.18(f)(3), (4), and (6)	Adhere to the minimum net heating value of gas specified in 60.18(c)(3)(ii) and maximum tip velocity specifications in 60.18(c)(5). Calculate heat content as specified in 60.18(f)(3). Calculate exit velocities as



	specified in 60.18(f)(4) and (6).*
60.5400(a) and 60.482-10a(g)	Repair detected leaks in the closed vent system.
60.5400(a) and 60.482-10a(h)	Allowances for delay of repair for leaks in closed vent systems.

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

d) Monitoring and/or Recordkeeping Requirements

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

60.5400(a), 60.482-10a(e), and 60.18(d)	Monitor the control device to ensure it is operated and maintained in conformance with its design.
60.5400(a), 60.482-10a(f), 60.485a(b)	Inspect each closed vent system, except as provided in 60.482-10a(i)-(k).
60.5400(a), 60.482-10a(d), 60.18(d), 60.18(f)(2)	Install, calibrate, operate and maintain the heat sensing monitoring device to monitor the presence of the flare pilot flame.
60.5400(a), 60.482-10a(l)	Maintain required records for all inspections of the closed vent systems.
60.5400(e), 60.486a(d)	Record the required information on design requirements and keep in a readily accessible location.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, OOOO, and VVa, including the following sections:

60.7(a)	Initial notification of the date construction of the affected facility commenced and the actual date of initial startup of the affected facility.
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60.5400(e), 60.487a(a)	Submit semiannual reports beginning 6 months after the initial startup date.
60.5400(e), 60.487a(b)-(c)	Include all required information in the initial semiannual report.  Include all required information in each subsequent semiannual report.

- (3) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of 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 Limitations:

NO<sub>x</sub> emissions shall not exceed 0.764 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The NO<sub>x</sub> emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

Pilot Gas Emissions

$$\begin{aligned}
 \text{NO}_x \text{ (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{NO}_x \text{ emissions factor lb/mmscf} \times \\
 &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\
 &= (0.00012 \text{ mmscf/hr} \times 100 \text{ lb/mmscf} \times 995 \text{ Btu/scf}) / 1,020 \\
 &= \text{Btu/scf} \\
 &= 0.012 \text{ lb/hr}
 \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.00012 mmscf/hr, based on manufacturer specifications

NO<sub>x</sub> EF (pilot light) = 100 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 995 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.012 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = 0.004 \text{ ton per month averaged over a twelve-month, rolling period}$$



Flared Gas Emissions

$$\begin{aligned} \text{NO}_x \text{ (ton/yr)} &= (\text{flared material heat input million Btu/yr} \times \text{NO}_x \text{ emissions factor lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= (131,923 \text{ million Btu/hr} \times 0.138 \text{ lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= 9.10 \text{ tons/yr} \end{aligned}$$

Where:

Flared material heat input = 131,923

NO<sub>x</sub> EF (flared gas) = 0.138lb/million Btu (AP-42 Table 1.4-2, 7/98)

Therefore:

(9.10 tons/yr) / (12 months/yr) = 0.76 ton per month averaged over a twelve-month, rolling period

**Total:**

0.004 ton/month + 0.76 ton/month = **0.764 ton per month averaged over a twelve month, rolling period**

b. Emissions Limitations:

CO emissions shall not exceed 3.024 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The CO emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

Pilot Gas Emissions

$$\begin{aligned} \text{CO (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{CO emissions factor lb/mmscf} \times \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.00012 \text{ mmscf/hr} \times 84 \text{ lb/mmscf} \times 995 \text{ Btu/scf}) / 1,020 \text{ Btu/scf} \\ &= 0.01 \text{ lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.00012 mmscf/hr, based on manufacturer specifications

CO EF (pilot light) = 84 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 995 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf



Therefore:  
 $[(0.01 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.004 \text{ ton per month averaged over a twelve-month, rolling period}}$

Flared Gas Emissions

$$\begin{aligned} \text{CO (ton/yr)} &= (\text{flared material heat input million Btu/yr} \times \text{CO emissions factor lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= (131,923 \text{ million Btu/hr} \times 0.55 \text{ lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= 36.28 \text{ tons/yr} \end{aligned}$$

Where:

Flared material heat input = 131,923

CO EF (flared gas) = 0.55lb/million Btu (AP-42 Table 1.4-2, 7/98)

Therefore:  
 $(36.28 \text{ tons/yr}) / (12 \text{ months/yr}) = 3.02 \text{ ton per month averaged over a twelve-month, rolling period}$

**Total:**

$0.004 \text{ ton/month} + 3.02 \text{ ton/month} = \mathbf{3.024 \text{ ton per month averaged over a twelve month, rolling period}}$

- c. Emissions Limitations:  
 SO<sub>2</sub> emissions shall not exceed 0.0026 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The SO<sub>2</sub> emissions limitations was derived by the following calculations using the inputs provided in the permittee's application:

Pilot Gas Emissions

$$\begin{aligned} \text{SO}_2 \text{ (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{SO}_2 \text{ emissions factor lb/mmscf} \times \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.00012 \text{ mmscf/hr} \times 0.6 \text{ lb/mmscf} \times 995 \text{ Btu/scf}) / 1,020 \text{ Btu/scf} \\ &= 0.00007 \text{ lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.00012 mmscf/hr, based on manufacturer specifications

SO<sub>2</sub> EF (pilot light) = 0.6 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 995 Btu/scf, based on manufacturer specifications



Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.00007\text{lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.00003 \text{ ton per month averaged over a twelve-month, rolling period}}$$

Flared Gas Emissions

$$\begin{aligned} \text{SO}_2 \text{ (ton/yr)} &= (\text{flared material heat input million Btu/yr} \times \text{SO}_2 \text{ emissions factor lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= (131,923 \text{ million Btu/hr} \times 0.000457\text{lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= 0.03 \text{ tons/yr} \end{aligned}$$

Where:

Flared material heat input = 131,923

SO<sub>2</sub> EF (flared gas) = 0.000457lb/million Btu (AP-42 Table 1.4-2, 7/98)

Therefore:

$$(0.03 \text{ ton/yr}) / (12 \text{ months/yr}) = 0.0026 \text{ ton per month averaged over a twelve-month, rolling period}$$

**Total:**

$$0.00003 \text{ ton/month} + 0.0026 \text{ ton/month} = \mathbf{0.0026 \text{ ton per month averaged over a twelve month, rolling period}}$$

d. Emissions Limitations:

Particulate emissions (PE) shall not exceed 0.033 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The PE limitation was derived by the following calculations using the inputs provided in the permittee's application:

Pilot Gas Emissions

$$\begin{aligned} \text{PE (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{PE emissions factor lb/mmscf} \times \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.00012 \text{ mmscf/hr} \times 5.7 \text{ lb/mmscf} \times 995 \text{ Btu/scf}) / 1,020 \text{ Btu/scf} \\ &= 0.0007\text{lb/hr} \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.00012 mmscf/hr, based on manufacturer specifications



PE EF (pilot light) = 5.7 lb/mmescf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 995 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.0007 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.0003 \text{ ton per month averaged over a twelve-month, rolling period}}$$

Flared Gas Emissions

$$\begin{aligned} \text{PE (ton/yr)} &= (\text{flared material heat input million Btu/yr} \times \text{PE emissions factor lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= (131,923 \text{ million Btu/hr} \times 0.0059 \text{ lb/million Btu}) / 2,000 \text{ lbs/ton} \\ &= 0.38 \text{ tons/yr} \end{aligned}$$

Where:

Flared material heat input = 131,923

PE EF (flared gas) = 0.0059 lb/million Btu (AP-42 Table 1.4-2, 7/98)

Therefore:

$$(0.38 \text{ ton/yr}) / (12 \text{ months/yr}) = 0.03 \text{ ton per month averaged over a twelve-month, rolling period}$$

**Total:**

$$0.003 \text{ ton/month} + 0.03 \text{ ton/month} = \mathbf{0.033 \text{ ton per month averaged over a twelve month, rolling period}}$$

- e. Emissions Limitations:  
 VOC emissions shall not exceed 3.83 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The VOC emissions limitations was derived by the following calculations using the inputs provided in the permittee's application:

Pilot Gas Emissions

$$\begin{aligned} \text{VOC (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{VOC emissions factor lb/mmscf} \times \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.00012 \text{ mmscf/hr} \times 5.5 \text{ lb/mmscf} \times 995 \text{ Btu/scf}) / 1,020 \text{ Btu/scf} \\ &= 0.0006 \text{ lb/hr} \end{aligned}$$



Where:

Maximum hourly pilot light fuel usage = 0.00012 mmscf/hr, based on manufacturer specifications

VOC EF (pilot light) = 5.5 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 995 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.0006 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.0002 \text{ ton per month averaged over a twelve-month, rolling period}}$$

Flared Gas Emissions

$$\begin{aligned} \text{VOC (ton/yr)} &= (\text{flared material heat input million Btu/yr} \times \text{VOC emissions factor lb/million Btu}) / 2,000 \text{ lbs/ton} + (1 - \text{flare control efficiency}) \times (\text{total uncontrolled VOC flash emissions tons/yr} + \text{total uncontrolled VOC emissions from T001-T005 working and breathing losses and truck loading}) \\ &= (131,923 \text{ million Btu/hr} \times 0.00539 \text{ lb/million Btu}) / 2,000 \text{ lbs/ton} + (1 - 0.98) \times (1,424.3 \text{ tons/yr} + 854.04 \text{ tons/yr}) \\ &= 45.92 \text{ tons/yr} \end{aligned}$$

Where:

Flared material heat input = 131,923 million Btu/yr, based on manufacturer specifications

VOC EF (flared gas) = 0.00539 lb/million Btu, AP-42 Table 1.4-2, 7/98

Flare control efficiency = 98%, based on manufacturer specifications

Total uncontrolled VOC flash emissions = 1,424.3 tons/yr, based on permittee's application

Total uncontrolled VOC emissions from T001-T005 working and breathing losses and truck loading = 854.04 tons/yr, based on permittee's application

Therefore:

$$(45.92 \text{ ton/yr}) / (12 \text{ months/yr}) = 3.83 \text{ ton per month averaged over a twelve-month, rolling period}$$

**Total:**

$$0.0002 \text{ ton/month} + 3.83 \text{ ton/month} = \mathbf{3.8302 \text{ ton per month averaged over a twelve month, rolling period}}$$



- f. Emissions Limitations:  
The flare shall be designed and operated with no visible emissions, except for a total of five minutes during any two consecutive hours.
- Applicable Compliance Method:  
Visible particulate emissions shall be determined according to USEPA Method 22. See f)(2).
- (2) Performance testing shall be conducted as required in 40 CFR Part 60, Subpart A and OOOO pursuant to 40 CFR 60.18(f)(1), 60.5410(e)(5), and 60.5413(a)(1). The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 180 days after initial startup of such facility.
  - b. The emissions testing shall be conducted to demonstrate compliance with the visible emission limitations for the flare in accordance with the requirements of 40 CFR 60.5413(a)(1).
  - c. The following test method shall be employed to demonstrate compliance with the allowable emission rate: visible emissions - Method 22 of 40 CFR 60, Appendix A.
  - d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - e. No later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emissions test(s).
  - f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



**Final Permit-to-Install**  
Utica Condensate Stabilization Facility  
**Permit Number:** P0116809  
**Facility ID:** 0634005057  
**Effective Date:** 1/15/2015

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of 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.



**4. P801, Equipment Leaks**

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

Equipment Leaks - Various equipment components, including valves, pumps, flanges, and connectors will be located throughout the plant that may result in fugitive emissions due to equipment leaks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 06/30/2008	Fugitive emissions of Volatile Organic Compounds (VOC) shall not exceed 0.66 tonper month averaged over a twelve-month, rolling period.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	40 CFR Part 60, Subparts A, OOOO, and VVa (40 CFR 60.5360-60.5430, 40 CFR 60.482-2a, 60.482-4a-60.482-11a)  [In accordance with 40 CFR 60.5365(f), this emissions unit includes the group of all equipment except compressors, within a process unit at an onshore natural gas processing plant.]	See c)(1), and d)(1) below.

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit for VOC is less than 10 tons/yr.

c) Operational Restrictions

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

60.5400(a) and 60.482-2a(b)(2)(ii)	Designate visual indication of liquids dripping from a pump seal as a leak, and repair the leak within 15 days of detection by eliminating visual indications of liquids dripping.
60.5400(a), 60.482-2a(c)(1)	Repair detected leaks from pumps in light liquid service not later than 15 calendar days after detection, except as provided in 60.482-9a.
60.5400(a) and 60.482-2a(c)(2)	Attempt first repair of detected leaks from pumps in light liquid service within 5 days after each leak is detected.
60.5400(a) and 60.482-2a(d)	Meet the requirements of 60.482-2a(d) for pumps equipped with a dual mechanical seal system.
60.5400(a), 60.482-2a(e) and 60.486a(e)	Meet the requirements of 60.482-2a(e) for pumps designated for no detectable emissions (less than 500ppm above background) in lieu of 60.482-2a(a), (c) and (d).
60.5400(a), 60.482-2a(g) and 60.486a(f)	Meet the requirements of 60.482-2(g) for pumps designated as unsafe to monitor in lieu of 60.482-2a(a) and (d)(4)-(6).
60.5400(a), 60.482-4a and 60.5401(b)(3)	Repair detected leaks from pressure relief devices in gas/vapor service as soon as practicable, but not later than 15 calendar days after detection, except as provided in 60.482-9a, and attempt first repair within 5 days after each leak is detected.*
60.5400(a) and 60.482-4a(d)	Meet the requirements of 60.482-4a(d)(2) for any pressure relief device equipped with a rupture disk upstream of the pressure relief



	device in lieu of 60.482-4(a) and (b).
60.5400(a), 60.482-5a and 60.5401(c)	Sampling connection systems are exempt from the requirements of 60.482-5a.
60.5400(a) and 60.482-6a(a)(1)	Equip each open-ended valve or line with a cap, blind flange, plug or a second valve, except as provided in 60.482-1a(c), (d) and (e).
60.5400(a), 60.482-6a(a)(2) and (b) through (e)	Operate each open-ended valve or line in compliance with the requirements of 60.482-6a(a)(2) and (b) through (e).
60.5400(a), 60.482-7a(d)(1) and (2)	Repair detected leaks from valves in gas/vapor or light liquid service as soon as practicable, but not later than 15 calendar days after detection, except as provided in 60.482-9a, and attempt first repair within 5 days after each leak is detected.
60.5400(a) and 60.482-7a(e)	Use best practices in the first attempt at repair of leaks from valves in gas/vapor or light liquid service.
60.5400(a) and 60.482-7a(f)	Meet the requirements of 60.482-7a(f) for valves in gas/vapor or light liquid service designated for no detectable emissions (less than 500 ppm above background) in lieu of 60.482-7a(a).
60.5400(a) and 60.482-7a(g)	Meet the requirements of 60.482-7a(g) for valves in gas/vapor or light liquid service designated as unsafe to monitor in lieu of 60.482-7a(a).
60.5400(a) and 60.482-7a(h)	Meet the requirements of 60.482-7a(h) for valves in gas/vapor or light liquid service designated as difficult to monitor in lieu of 60.482-7a(a).
60.5400(a) and 60.482-8a(c)	Repair detected leaks from pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors as soon as practicable, but not later than 15 calendar days after detection, except as provided in 60.482-9a, and attempt first repair within 5 days after each leak is detected.



60.5400(a) and 60.482-8a(d)	Use best practices in the first attempt at repair of leaks from pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors.
60.5400(a) and 60.482-9a	Comply with the requirements in 60.482-9a for delays and repair.
60.5400(a) and 60.482-11a(d)	Repair detected leaks from connectors in gas/vapor or light liquid service as soon as practicable, but not later than 15 calendar days after detection, except as provided in 60.482-9a, and attempt first repair within 5 days after each leak is detected.
60.5400(a) and 60.482-11a(e)	Meet the requirements of 40 CFR 60.482-11a(e) for connectors that are designated as unsafe to monitor in lieu of 40 CFR part 60.482-11a(a) and (b).
60.5400(a) and 60.482-11a(f)	Meet the requirements of 40 CFR 60.482-11a(f) for connectors that are inaccessible, ceramic, or ceramic-lined in lieu of 40 CFR 60.482-11a(a) and (b).
60.5400(a) and 60.482-11a(g)	Identification requirements for connectors in gas/vapor or light liquid service.

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

d) Monitoring and/or Recordkeeping Requirements

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

60.5400(a) and (d), 60.482-2a(a)(1) and 60.485a(b)	Monitor each pump in light liquid service within 30 days after the end of the startup period and monthly thereafter to detect leaks, except as provided in 60.482-1a(f) and 60.482-2a(d), (e) and (f).
60.5400(a) and 60.482-2a(a)(2)	Visually inspect each pump in light liquid service each week for indications of liquids dripping from the pump seal, except as provided in 60.482-1a(f).
60.5400(a) and (d), 60.482-2a(b)(1)	Detect leaks from pumps in light liquid service at an instrument rating of 5,000 ppm for



and 60.485a(b)(1)	pumps handling polymerizing monomers or at an instrument rating of 2,000 ppm for all other pumps.
60.5400(a) and 60.482-2a(b)(2)(i)	Monitor each pump in light liquid service in accordance with 60.485a(b) within 5 days of discovery of liquids dripping from the pump seal.*
60.5400(a) and 60.482-2a(h)	Alternate inspection requirements for pumps located at unmanned plant sites.
60.5400(a), 60.482-4a and 60.5401(b)(1)	Monitor each pressure relief device in gas/vapor service quarterly and within 5 days after each pressure release to detect leaks in accordance with 60.485a(b).*
60.5400(a) and (d), 60.5401(b)(2), 60.482-4a and 60.485a(b)	Detect leaks from pressure relief devices in gas/vapor service at an instrument rating of 500 ppm.*
60.5400(a) and 60.482-7a(a)	Monitor each valve in gas/vapor and light liquid service within 30 days after the end of the startup period and monthly thereafter to detect leaks, except as provided in 60.482-1a(c) and (f), 60.483-1a and 60.483-2a and 60.482-7a(f), (g) and (h).*
60.5400(a) and (d), 60.482-7a(b), and 60.485a(b)(1)	Detect leaks from valves in gas/vapor and light liquid service at an instrument rating of 500 ppm.
60.5400(a), 60.482-7a(c)(1)(i)	Monitor each valve in gas/vapor or light liquid service for which a leak is not detected for 2 successive months during the first month of each quarter until a leak is detected.*
60.5400(a), 60.482-7a(c)(1)(ii)	Monitor assigned subgroups of valves in gas/vapor or light liquid service that are inspected during a different month during the quarter, provided each subgroup is monitored ever 3 months.*
60.5400(a), 60.482-7a(c)(2)	Monitor leaking valves in gas/vapor or light liquid service monthly until a leak is not detected for 2 successive months.
60.5400(a) and 60.482-8a(a)(1) or (2)	Monitor pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors within 5



	days and comply with 60.482-8a(b) through (d) if visual, audible, olfactory or other detection methods indicate a potential leak, or eliminate indications of leaks within 5 calendar days of detection.
60.5400(a) and (d), 60.482-8a(b) and 60.485(b)(1)	Detect leaks from pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and connectors at an instrument rating of 10,000 ppm.
60.5400(a) and 60.482-11a(a) and (b)(3)	Monitor all connectors in gas/vapor and light liquid service for leaks within 12 months of compliance date or initial startup and thereafter in accordance with 60.482-11a(b)(3) to detect leaks, except as provided in 60.482-1a(c) and 60.482-11a(e).
60.5400(a) and (d), 60.482-11a(b)(1)-(2), and 60.485a(b)(1)	Detect leaks from connectors in gas/vapor and light liquid service at an instrument rating of 500 ppm.
60.5400(a), 60.482-11a(b)(3)(iv)	Monitor leaking connectors in gas/vapor or light liquid service within 90 days after repair to confirm that the connector is no longer leaking.
60.5400(a), 60.482-11a(c)	Procedures for calculating the percentage of leaking connectors in gas/vapor or light liquid service.
60.5400(d) and 60.482a(d) through (f)	Comply with procedures and sampling requirements for determining VOC service and light liquid service.*
60.5400(e) and 60.5421(b)	Maintain required information for pressure relief devices.*
60.5400(e), 60.486a(b) and (c)	Maintain required information for detected leaks.
60.5400(e) and 60.486a(e)	Maintain required information pertaining to equipment subject to the requirements of 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a to 60.482-11a.
60.5400(e) and 60.486a(f)	Maintain required information for valves subject to 60.482-7a(g) and (h), all pumps subject to 60.482-2a(g), and all connectors



	subject to 60.482-11a(e).
60.5400(e) and 60.486a(h)	Maintain required information on design criteria in 60.482-2a(d)(5).

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts OOOO and VVa, including the following sections:

60.7(a)	Initial notification of the date construction of the affected facility commenced and the actual date of initial startup of the affected facility.
60.5400(e), and 60.487a(a)	Submit semiannual reports beginning six months after the initial startup date.
60.5400(e), 60.487a(b) and (c), and 60.5422	Initial and subsequent semiannual report requirements.
60.5400(e), 60.5422	Perform reporting with respect to VOC requirements.

- (3) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of 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:

Fugitive emissions of VOC shall not exceed 0.66 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The monthly VOC emissions limitation was derived by the following calculation based on the emissions factors (lb/hr/component) provided in Table 2-4 of U.S.



EPA's Protocol for Equipment Leak Emission Estimates (11/95) for components in gas, light oil, and water/oil service:

$$\begin{aligned}
 \text{VOC} = & [(\# \text{ of valves in gas service} \times \text{gas service valve EF}) \\
 & + (\# \text{ of valves in light oil service} \times \text{light oil service valve EF}) \\
 & + (\# \text{ of pumps in gas service} \times \text{gas service pump EF}) \\
 & + (\# \text{ of pumps in light oil service} \times \text{light oil service pump EF}) \\
 & + (\# \text{ of connectors/flanges in gas service} \times \text{gas service connector/flange EF}) \\
 & + (\# \text{ of connectors/flanges in light oil service} \times \text{light oil service connector/flange EF}) \\
 & + (\# \text{ of other points in light oil service} \times \text{light oil service other equipment EF})], \text{ then}
 \end{aligned}$$

$$\times 1.15^* \times 8,760 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} / (12 \text{ months/year}) = \geq \mathbf{0.66 \text{ ton per month averaged over a twelve-month, rolling period}}$$

Where:

$$\text{Valve EFs}^{**} = 0.00156307558 \text{ lb/hr/source for gas service, and } 0.00132056738 \text{ lb/hr/source for light oil service;}$$

$$\text{Pump Seal EFs} = 0.005291088 \text{ lb/hr/source for gas service, and } 0.0108687766 \text{ lb/hr/source for light oil service;}$$

$$\text{Connector/Flanges EFs} = 0.00086 \text{ lb/hr/source for gas service, and } 0.0004629702 \text{ lb/hr/source for light oil service;}$$

$$\text{Open-Ended Lines EFs} = 0.00440924 \text{ lb/hr/source for gas service, and } 0.003086468 \text{ lb/hr/source for light oil service;}$$

$$\text{Other}^{***} \text{ EFs} = 0.019400656 \text{ lb/hr/source for gas service}$$

\*Assume a maximum leak rate 15% greater than the measured average leak rate

\*\*Emissions factors calculated by converting kg/hr/source to lb/hr/source

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

\*\*\*\*As an alternative to using the above emissions factors to calculate VOC emissions, the facility may use facility specific VOC information for site specific emissions factors.



**Final Permit-to-Install**  
Utica Condensate Stabilization Facility  
**Permit Number:** P0116809  
**Facility ID:** 0634005057  
**Effective Date:** 1/15/2015

g) Miscellaneous Requirements

(1) None.



**5. T005, Storage Tank #5**

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

Storage Tank #5 - 50,000 barrel (bbl) condensate storage tank controlled by a flare (P005) with a 98% control and 100% capture of VOC emissions

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 06/30/2008	Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions.
b.	OAC rule 3745-21-09(L)	The requirements of this rule are less stringent than the requirements of 40 CFR Part 60, Subpart Kb.
c.	40 CFR Part 60, Subpart Kb (40 CFR 60.110b – 60.117b)  [In accordance with 40 CFR 60.110b(a) and 60.112b(b), this emissions unit is a storage vessel with a capacity greater than 75 m <sup>3</sup> (19,815 gallons) that is used to store volatile organic liquids with maximum true vapor pressures $\geq$ 76.6 kPa (11.11 psia) for which construction, reconstruction or modification is commenced after July 23, 1984.]	See b)(2)a. and d. and c)(1) below.
d.	40 CFR Part 60, Subpart A (40 CFR 60.1-19)	General Provisions



(2) Additional Terms and Conditions

- a. Owners or operators may choose to comply with 40 CFR part 65, Subpart C, to satisfy the requirements of 60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR Part 65, Subpart C, the monitoring requirements of 60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR Part 65 are provided in 40 CFR 65.1.
- b. Owners or operators who choose to comply with 40 CFR Part 65, Subpart C, must also comply with 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of Subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR Part 65, Subpart C, except that provisions required to be met prior to implementing 40 CFR Part 65 still apply. Owners and operators who choose to comply with 40 CFR Part 65, Subpart C, must comply with 40 CFR Part 65, Subpart A.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart Kb, including the following sections:

60.112b(b)(1)	Equip each storage vessel with a closed vent system and control device that meets the specifications of 60.112b(a)(3).
60.112(a)(3)(i)	Design the closed vent system to collect all vapors and gases discharged from the storage vessel. Operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections using EPA Method 21.
60.112(a)(3)(ii), 60.18(b) and 60.18(c)(6)	Design and operate the control device to reduce inlet VOC emissions by 95% or greater that meets the specifications in 60.18 of the General Provisions. Flares shall be steam-assisted, air-assisted or non-assisted.
60.18(c)(1)	Design and operate a flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.



60.18(c)(2)	Operate the flare with a flame present at all times.
60.113b(d), 60.18(c)(3) and 60.18(f)(3) – (6)	Comply with the heat content specifications in 60.18(c)(3)(ii) and the maximum tip velocity specifications in 60.18(c)(4), or that meet the requirements of 60.18(c)(3)(i) as demonstrated by the calculations in 60.18(f)(3) – (6).
60.113b(d) and 60.18(e)	Operate the flare at all times when emissions may be vented to it.

- (2) The permittee shall minimize the amount of fugitive emissions of VOC by conducting all loading activities in a manner consistent with safety and good air pollution control practices.
- (3) The permittee shall install and operate a VRU and a flare with a 98% destruction of VOC whenever this emissions unit is in operation and shall maintain the VRU and flare in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the VRU and flare are not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the VRU and flare shall be expeditiously repaired or otherwise returned to these documented operating conditions.

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

- (1) 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.
- (2) The permittee shall conduct periodic inspections of the VRU and the flare to determine whether they are 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 VRU and flare 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 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 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 maintain records that document any time periods when the VRU and flare were not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the system 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.
- (6) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.113b (a)(1)	Visual inspection requirements after installing permanently affixed roof and internal floating roof
60.113b (a)(2)	Visual inspection requirements for vessels equipped with a liquid-mounted or mechanical shoe primary seal.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required Written Notification prior to filling or refilling each storage vessel for which inspection was required by (a)(1) and (a)(4).
60.115b and 60.116b (a)	Report and record retention



	requirements
60.11b (a)(2)	Required inspection records
60.116b (b)	Dimension of storage vessel and capacity records.
60.116b (c)	Required records of VOL stored, period of storage, and max. true vapor pressure.
60.116b (e)(1)-(3)	Means for determining maximum true vapor pressure.
60.116b (f)(1)-(2)	Requirements for vessel storing waste mixture of indeterminate or variable composition.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.115b (a)(1)	Required certification control equipment requirement.
60.115b (a)(3) – (4)	Required visual inspection report when defects are detected.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required written notification prior to filling or refilling each storage vessel for which inspection was required by



	(a)(1) and (a)(4).
60.115b	Report and record retention requirements
60.11b (a)(2)	Required inspection records

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 Standard:

Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions

Applicable Compliance Method:

Compliance is demonstrated by VRU system and flare manufacturer's design efficiency with 98% control efficiency and 100% capture.

g) Miscellaneous Requirements

(1) None.



**6. T006, Storage Tank #6**

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

Storage Tank #6 - 2,500 barrel (bbl) internal floating roof product re-run storage tank

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 06/30/2008	The requirements of this rule are equivalent to the requirements of 40 CFR Part 60, Subpart Kb.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	OAC rule 3745-21-09(L)	See c)(3) through c)(5) below.
d.	40 CFR Part 60, Subpart Kb (40 CFR 60.110b – 60.117b)  [In accordance with 40 CFR 6.110b this emissions unit is a storage vessel with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984]	See b)(2)c. and d. and c)(2) below.
e.	40 CFR Part 63, Subpart A (40 CFR 60.1-19)	General Provisions

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit for VOC is less than 10 tons/yr.

- c. Owners or operators may choose to comply with 40 CFR part 65, Subpart C, to satisfy the requirements of 60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR Part 65, Subpart C, the monitoring requirements of 60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR Part 65 are provided in 40 CFR 65.1.
- d. Owners or operators who choose to comply with 40 CFR Part 65, Subpart C, must also comply with 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of Subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR Part 65, Subpart C, except that provisions required to be met prior to implementing 40 CFR Part 65 still apply. Owners and operators who choose to comply with 40 CFR Part 65, Subpart C, must comply with 40 CFR Part 65, Subpart A.

c) Operational Restrictions

- (1) The permittee shall minimize the amount of fugitive emissions of VOC by conducting all loading activities in a manner consistent with safety and good air pollution control practices.
- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.112(b)(a)(1)(i)-(ix)	Required specifications for fixed roof in combination with an internal floating roof.
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- (3) No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of rule 3745-21-04 of the Administrative Code unless such tank, is designed or equipped as follows, except where exempted under paragraph (L)(2) f this rule:
  - i. Vapor control equipment which is one of the following:
    - (a) Internal floating roof; or



- (b) Alternative equivalent control for VOC emissions as may be approved by the director.
- (4) If equipped with an internal floating roof, the automatic bleeder vents are to be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer’s recommended setting.
- (5) All openings, except stub drains, are to be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.113b (a)(1)	Visual inspection requirements after installing permanently affixed roof and internal floating roof
60.113b (a)(2)	Visual inspection requirements for vessels equipped with a liquid-mounted or mechanical shoe primary seal.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required Written Notification prior to filling or refilling each storage vessel for which inspection was required by (a)(1) and (a)(4).
60.115b and 60.116b (a)	Report and record retention requirements
60.11b (a)(2)	Required inspection records
60.116b (b)	Dimension of storage vessel and capacity records.
60.116b (c)	Required records of VOL stored, period of storage, and max. true vapor



	pressure.
60.116b (e)(1)-(3)	Means for determining maximum true vapor pressure.
60.116b (f)(1)-(2)	Requirements for vessel storing waste mixture of indeterminate or variable composition.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.115b (a)(1)	Required certification control equipment requirement.
60.115b (a)(3) – (4)	Required visual inspection report when defects are detected.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required written notification prior to filling or refilling each storage vessel for which inspection was required by (a)(1) and (a)(4).
60.115b	Report and record retention requirements
60.11b (a)(2)	Required inspection records



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.



**7. Emissions Unit Group -1,953 HP Natural Gas Generator: P001, P002, P003**

EU ID	Operations, Property and/or Equipment Description
P001	NG Generator #1 - Cummins QSK60G - Natural gas-fired four-stroke, lean burn internal combustion non-emergency engine rated at an operating capacity of 1,953 horsepower and equipped with an oxidation catalyst, used to control CO and VOC.
P002	NG Generator #2 - Cummins QSK60G - Natural gas-fired four-stroke, lean burn internal combustion non-emergency engine rated at an operating capacity of 1,953 horsepower and equipped with an oxidation catalyst, used to control CO and VOC.
P003	NG Generator #3 - Cummins QSK60G - Natural gas-fired four-stroke, lean burn internal combustion non-emergency engine rated at an operating capacity of 1,953 horsepower and equipped with an oxidation catalyst, used to control CO and VOC.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) 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 06/30/2008	The nitrogen oxide (NO <sub>x</sub> ), carbon monoxide (CO), and volatile organic compound (VOC) emission limitations specified by this rule is equivalent to the emission limitations established pursuant to 40 CFR Part 63, Subpart JJJJ.
b.	OAC rule 3745-31-05(A)(3), as effective 06/30/2008	Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.0028 tonper month averaged over a twelve-month, rolling period.  Particulate emissions (PE) shall not exceed 0.05 ton per month averaged over a twelve-month, rolling period.  See b)(2)a. below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
d.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input.
e.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		exceed 20% opacity, as a six-minute average.
f.	40 CFR Part 60, Subpart JJJJ (40 CFR 60. 4230 – 60.4248)  [In accordance with 40 CFR Part 60.4233(e) and 40 CFR Part 60, Subpart JJJJ, Table 1, this emissions unit is a ≥500 hp, natural gas-fired, stationary spark internal combustion engine manufactured after July 1, 2010 that is located at a new natural gas compressor station and is subject to the emission limitations and control measures specified in this section.]	NO <sub>x</sub> emissions shall not exceed 1.00 g/hp-hr.  CO emissions shall not exceed 2.0 g/hp-hr.  VOC emissions shall not exceed 0.7 g/hp-hr.  [40 CFR Part 60.4233(e) and 40 CFR Part 60, Subpart JJJJ, Table 1]  See b(2)c. below.
g.	40 CFR Part 60.1-19 (40 CFR 60.4246)	Table 3 to Subpart JJJJ of 40 CFR Part 60 – Applicability of General Provisions to Subpart JJJJ shows which part of the General Provisions in 40 CFR Part 60.1-19 apply.

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO<sub>2</sub>, and particulate emissions from this air contaminant source since the potential to emit for SO<sub>2</sub>, and particulate emissions is less than 10 tons/yr.

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

60.4236(a)	Installation deadlines
60.4243(b)	Compliance demonstration



c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4234	Duration of compliance with emission standards
60.4243(b)	Maintenance requirements
60.4243(e)	Alternative fuel

- (3) The permittee shall install and operate the engines with an oxidation catalyst for the control of CO and VOC emissions whenever this emissions unit is in operation and shall maintain the engines in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the engine is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the engine shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4245(a), (c) and (d)	Notification, record keeping, and reporting requirements
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- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, operating manuals for the engines, 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 engine 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.

- (5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the engine 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 engine 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.

- (7) The permittee shall maintain records that document any time periods when the oxidation catalyst was not in service when the emissions unit(s) was/were in operation, as well as a record of all operations during which the engine was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (4) The permittee shall submit notifications and reports to the Ohio EPA, Southeast District Office as required pursuant to 40 CFR Part 60, Subpart JJJJ, per the following sections:

60.4243(b)(2)(ii) and 60.4245	Maintain records of maintenance plan and records of maintenance conducted on the engine
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60.4245(a)	Maintain records of notifications and supporting documentation
60.4245(c)	Must submit an initial notification

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:

SO<sub>2</sub> shall not exceed 0.0028ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The monthly SO<sub>2</sub> emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$(\text{Rated capacity bhp} \times \text{SO}_2 \text{ emissions factor g/bhp-hr}) / (453.59237 \text{ g/lb}) = \text{lbs/hr SO}_2$$

$$[(\text{SO}_2 \text{ lbs/hr} \times 8,760 \text{ hrs/yr}) / (2,000 \text{ lbs/ton})] / (12 \text{ months/yr}) = \text{tons per month averaged over a twelve-month rolling period}$$

Where:

$$\text{Rated capacity} = 1,953 \text{ bhp}$$

$$\text{SO}_2 \text{ emission factor} = 0.00179 \text{ g/bhp-hr}$$

Therefore:

$$(1,953 \text{ bhp} \times 0.00179 \text{ g/bhp-hr}) / (453.59237 \text{ g/lb}) = 0.0077 \text{ lb/hr}$$

$$[(0.0077 \text{ lb/hr} \times 8,760 \text{ hrs/yr}) / (2,000 \text{ lbs/ton})] / (12 \text{ months/yr}) = \mathbf{0.0028 \text{ ton per month averaged over a twelve-month rolling period}}$$

b. Emissions Limitation:

PE shall not exceed 0.05 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The monthly PE limitation was derived by the following calculations using the inputs provided in the permittee's application:



$$\text{(Rated capacity bhp} \times \text{PE emissions factor g/bhp-hr)} / (453.59237 \text{ g/lb}) = \text{lbs/hr PE}$$

$$[(\text{PE lbs/hr} \times 8,760 \text{ hrs/yr}) / (2,000 \text{ lbs/ton})] / (12 \text{ months/yr}) = \text{tons per month averaged over a twelve-month rolling period}$$

Where:

$$\text{Rated capacity} = 1,953 \text{ bhp}$$

$$\text{PE emission factor} = 0.0304 \text{ g/bhp-hr}$$

Therefore:

$$(1,953 \text{ bhp} \times 0.0304 \text{ g/bhp-hr}) / (453.59237 \text{ g/lb}) = 0.13 \text{ lb/hr}$$

$$[(0.13 \text{ lb/hr} \times 8,760 \text{ hrs/yr}) / (2,000 \text{ lbs/ton})] / (12 \text{ months/yr}) = \mathbf{0.05 \text{ ton per month averaged over a twelve-month rolling period}}$$

c. Emissions Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

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

d. Emissions Limitation:

PE shall not exceed 0.062 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.

e. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined according to 40 CFR Part 60, Appendix A, U.S.EPA Methods 1 - 4, 7E and 320. See f)(2) below.



f. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined according to 40 CFR Part 60, Appendix A, U.S. EPA Methods 1 - 4, 10, and 320. See f)(2) below.

g. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with these emission limitations shall be determined according to 40 CFR Part 60, Appendix A, U.S. EPA Methods 1 or 1A, 2 or 19, 3, 3A or 3B, 4, 18, 25A and 320. See f)(2) below.

- (2) Compliance 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 must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions.

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)e.-g. 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 day s 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.



**8. Emissions Unit Group -29.0 MMBtu/hr Hot Oil Heater: B001, B002**

EU ID	Operations, Property and/or Equipment Description
B001	Hot Oil Heater #1 - 29.0 MMBtu/hr natural gas-fired process heater supplying heat necessary to support operation of the condensate stabilization train
B002	Hot Oil Heater #2 - 29.0 MMBtu/hr natural gas-fired process heater supplying heat necessary to support operation of the condensate stabilization train

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) 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 06/30/2008	Volatile organic compound (VOC) emissions shall not exceed 0.06ton per month averaged over a twelve-month, rolling period.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.006 ton per month averaged over a twelve-month, rolling period.  Particulate emissions (PE) shall not exceed 0.08 ton per month averaged over a twelve-month, rolling period.  Install hot oil heaters designed to meet 50 ppm of carbon monoxide (CO) by volume at 15% O <sub>2</sub> reference conditions and 13.4% O <sub>2</sub> in the exhaust stack.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	OAC rule 3745-31-05(A)(3), as effective 06/30/2008	Install hot oil heaters designed to meet 80 ppm of nitrogen oxide (NO <sub>x</sub> ) by volume at 15% O <sub>2</sub> reference conditions and 13.4% O <sub>2</sub> in the exhaust stack.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 lb/MMBtu actual heat input.

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, SO<sub>2</sub>, VOC, and particulate emissions from this air contaminant source since the potential to emit for CO, SO<sub>2</sub>, VOC, and particulate emissions is less than 10 tons/yr.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and associated natural gas vapors that have been recovered from storage tanks at the facility in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas and associated natural gas vapors that have been recovered from storage tanks at the facility, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and associated natural gas vapors that have been recovered from storage tanks at the facility was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.



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 shall not exceed 0.06 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The VOC emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned} \text{VOC (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{VOC emissions factor lb/mmscf} \times \\ & \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\ &= (0.0242 \text{ mmscf/hr} \times 5.5 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\ & \text{Btu/scf} \\ &= 0.157 \text{ lb/hr} \end{aligned}$$

Where:

Maximum hourly fuel usage = 0.0242 mmscf/hr, based on manufacturer specifications

VOC EF = 5.5 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.157 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.06 \text{ ton per month averaged over a twelve-month, rolling period}}$$

If required, the VOC emission rate shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

SO<sub>2</sub> emissions shall not exceed 0.006 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The SO<sub>2</sub> emissions limitation was derived by the following calculations using the inputs provided in the permittee's application:



$$\begin{aligned}
 \text{SO}_2 \text{ (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{SO}_2 \text{ emissions factor lb/mmscf} \times \\
 &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\
 &= (0.0242 \text{ mmscf/hr} \times 0.6 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\
 &= \text{Btu/scf} \\
 &= 0.0171 \text{ lb/hr}
 \end{aligned}$$

Where:

Maximum hourly fuel usage = 0.0242 mmscf/hr, based on manufacturer specifications

SO<sub>2</sub> EF (pilot light) = 0.6 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications

Standard heat content = 1,020 Btu/scf

Therefore:

$$[(0.0171 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.006 \text{ ton per month averaged over a twelve-month, rolling period}}$$

If required, the SO<sub>2</sub> emission factor shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emissions Limitations:

PE shall not exceed 0.08 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

The PE limitation was derived by the following calculations using the inputs provided in the permittee's application:

$$\begin{aligned}
 \text{PE (lbs/hr)} &= (\text{fuel usage mmscf/hr} \times \text{PE emissions factor lb/mmscf} \times \\
 &= \text{actual heat content Btu/scf}) / \text{standard heat content Btu/scf} \\
 &= (0.0242 \text{ mmscf/hr} \times 7.6 \text{ lb/mmscf} \times 1,200 \text{ Btu/scf}) / 1,020 \\
 &= \text{Btu/scf} \\
 &= 0.2164 \text{ lb/hr}
 \end{aligned}$$

Where:

Maximum hourly pilot light fuel usage = 0.0242 mmscf/hr, based on manufacturer specifications

PE EF = 7.6 lb/mmscf, AP-42, Section 1.4, Table 1.4-1, 2, 3

Actual heat content = 1,200 Btu/scf, based on manufacturer specifications



Standard heat content = 1,020 Btu/scf

Therefore:

$[(0.2164 \text{ lb/hr} \times 8,760 \text{ hrs/year}) / (2,000 \text{ lbs/ ton})] / (12 \text{ months/year}) = \mathbf{0.08 \text{ ton per month averaged over a twelve-month, rolling period}}$

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 U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Design Standard:

Install hot oil heaters designed to meet 50 ppm of CO by volume at 15% O<sub>2</sub> reference conditions and 13.4% O<sub>2</sub> in the exhaust stack.

Applicable Compliance Method:

Compliance is demonstrated by hot oil heater manufacturer's design specifications.

e. Design Standard:

Install hot oil heaters designed to meet 80 ppm of NO<sub>x</sub> by volume at 15% O<sub>2</sub> reference conditions and 13.4% O<sub>2</sub> in the exhaust stack.

Applicable Compliance Method:

Compliance is demonstrated by hot oil heater manufacturer's design specifications.

f. Emissions Limitation:

PE shall not exceed 0.020 lb/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.

g) Miscellaneous Requirements

(1) None.



**9. Emissions Unit Group – 5,000 bbl Condensate Storage Tank: T001, T002, T003, T004**

EU ID	Operations, Property and/or Equipment Description
T001	Storage Tank #1 - 5,000 barrel (bbl) condensate storage tank controlled by a flare (P005) with a 98% control and 100% capture of VOC emissions
T002	Storage Tank #2 - 5,000 barrel (bbl) condensate storage tank controlled by a flare (P005) with a 98% control and 100% capture of VOC emissions
T003	Storage Tank #3 - 5,000 barrel (bbl) condensate storage tank controlled by a flare (P005) with a 98% control and 100% capture of VOC emissions
T004	Storage Tank #4 - 5,000 barrel (bbl) condensate storage tank controlled by a flare (P005) with a 98% control and 100% capture of VOC emissions

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) 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 06/30/2008	Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008	See b)(2)b. below.
c.	OAC rule 3745-21-09(L)(1)(a)(ii)	Install and operate aVRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions.  See b)(2)e. below.
d.	40 CFR part 60, Subpart Kb (40 CFR 60.110b – 60.117b)  [In accordance with 40 CFR 6.110b this emissions unit is a storage vessel with a capacity greater than or equal to 75 cubic meters that is	See b)(2)c. and d. and c)(4) below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984]	
e.	40 CFR Part 63, Subpart A (40 CFR 60.1-19)	General Provisions
f.	OAC rule 3745-31-05(E)	Install and operate a VRU system and a flare that shall be designed to have a 98% control and 100% capture of volatile organic compounds (VOC) emissions.  VOC emissions shall not exceed 8.04 tons/yr.

(2) Additional Terms and Conditions

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit for VOC is less than 10 tons/yr taking into account the voluntary restriction from OAC rule 3745-31-05(E).

- c. Owners or operators may choose to comply with 40 CFR part 65, Subpart C, to satisfy the requirements of 60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR Part 65, Subpart C, the monitoring requirements of 60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR Part 65 are provided in 40 CFR 65.1.
- d. Owners or operators who choose to comply with 40 CFR Part 65, Subpart C, must also comply with 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of Subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR Part 65, Subpart C, except that provisions required to be met prior to implementing 40 CFR Part 65 still apply. Owners and operators who choose to comply with 40 CFR Part 65, Subpart C, must comply with 40 CFR Part 65, Subpart A.



- e. The installation and operation of aVRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions has been deemed an alternative equivalent control for VOC emissions.

c) Operational Restrictions

- (1) The permittee shall minimize the amount of fugitive emissions of VOC by conducting all loading activities in a manner consistent with safety and good air pollution control practices.
- (2) The permittee shall install and operate a VRU and a flare with a 98% destruction of VOC whenever this emissions unit is in operation and shall maintain the VRU and flare in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) In the event the VRU and flare are not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the VRU and flare shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart Kb, including the following sections:

60.112b(b)(1)	Equip each storage vessel with a closed vent system and control device that meets the specifications of 60.112b(a)(3).
60.112(a)(3)(i)	Design the closed vent system to collect all vapors and gases discharged from the storage vessel. Operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections using EPA Method 21.
60.112(a)(3)(ii), 60.18(b) and 60.18(c)(6)	Design and operate the control device to reduce inlet VOC emissions by 95% or greater that meets the specifications in 60.18 of the General Provisions. Flares shall be steam-assisted, air-assisted or non-assisted.
60.18(c)(1)	Design and operate a flare with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
60.18(c)(2)	Operate the flare with a flame present at



	all times.
60.113b(d), 60.18(c)(3) and 60.18(f)(3) – (6)	Comply with the heat content specifications in 60.18(c)(3)(ii) and the maximum tip velocity specifications in 60.18(c)(4), or that meet the requirements of 60.18(c)(3)(i) as demonstrated by the calculations in 60.18(f)(3) – (6).
60.113b(d) and 60.18(e)	Operate the flare at all times when emissions may be vented to it.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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.
- (2) The permittee shall conduct periodic inspections of the VRU and the flare to determine whether they are 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 VRU and flare 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 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 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 maintain records that document any time periods when the VRU and flare were not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the system 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.
- (6) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.113b (a)(1)	Visual inspection requirements after installing permanently affixed roof and internal floating roof
60.113b (a)(2)	Visual inspection requirements for vessels equipped with a liquid-mounted or mechanical shoe primary seal.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required Written Notification prior to filling or refilling each storage vessel for which inspection was required by (a)(1) and (a)(4).
60.115b and 60.116b (a)	Report and record retention requirements
60.11b (a)(2)	Required inspection records
60.116b (b)	Dimension of storage vessel and capacity records.
60.116b (c)	Required records of VOL stored, period of storage, and max. true vapor pressure.
60.116b (e)(1)-(3)	Means for determining maximum true vapor pressure.



60.116b (f)(1)-(2)	Requirements for vessel storing waste mixture of indeterminate or variable composition.
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e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart Kb, including the following sections:

60.115b (a)(1)	Required certification control equipment requirement.
60.115b (a)(3) – (4)	Required visual inspection report when defects are detected.
60.113b (a)(3)(i)-(ii)	Visual inspection requirements for vessels equipped with a double-seal system.
60.113b (4)	Visual inspection required each time storage vessel is emptied and degassed.
60.113b (5)	Required written notification prior to filling or refilling each storage vessel for which inspection was required by (a)(1) and (a)(4).
60.115b	Report and record retention requirements
60.11b (a)(2)	Required inspection records

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 Standard:

Install a VRU system and a flare that shall be designed to have a 98% control and 100% capture of VOC emissions

Applicable Compliance Method:

Compliance is demonstrated by VRU system and flare manufacturer's design efficiency with 98% control efficiency and 100% capture.

b. Emissions Limitation:

VOC emissions shall not exceed 8.04 tons/yr.

Applicable Compliance Method:

Compliance with the above emissions limitation shall be determined using a current version of the U.S. EPA's TANKS software program for storage tank working/breathing losses; either the TANKS software program or other process simulation programs such as, but not limited to, HYSYS or ProMax, to calculate flash losses; the Gas Research Institute's simulation program GLY Calc version 4 or equivalent to calculate flash tank off-gas emissions; and an assumed destruction efficiency of 98% for the flare as presented in the application.

g) Miscellaneous Requirements

(1) None.