



5/4/2015

Certified Mail

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Arrow Material Services  
2605 Nicholson Road  
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|    |                                    |
|----|------------------------------------|
| No | TOXIC REVIEW                       |
| No | SYNTHETIC MINOR TO AVOID MAJOR NSR |
| No | CEMS                               |
| No | MACT/GACT                          |
| No | NSPS                               |
| No | NESHAPS                            |
| No | NETTING                            |
| No | MODELING SUBMITTED                 |
| No | SYNTHETIC MINOR TO AVOID TITLE V   |
| No | FEDERALLY ENFORCABLE PTIO (FEPTIO) |
| No | SYNTHETIC MINOR TO AVOID MAJOR GHG |

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0684025003  
Permit Number: P0117859  
Permit Type: Initial Installation  
County: Washington

Dear Permit Holder:

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

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

**How to appeal this permit**

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

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

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

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

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

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

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

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

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

Sincerely,



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

Cc: Ohio EPA-SEDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Arrow Material Services**

|                |                      |
|----------------|----------------------|
| Facility ID:   | 0684025003           |
| Permit Number: | P0117859             |
| Permit Type:   | Initial Installation |
| Issued:        | 5/4/2015             |
| Effective:     | 5/4/2015             |
| Expiration:    | 5/4/2025             |





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Arrow Material Services

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**Final Permit-to-Install and Operate**  
Arrow Material Services  
**Permit Number:** P0117859  
**Facility ID:** 0684025003  
**Effective Date:** 5/4/2015

## Authorization

Facility ID: 0684025003  
Application Number(s): A0051453, A0052279, A0053385  
Permit Number: P0117859  
Permit Description: Permit-to-install and operate for a condensate stabilization facility and barge load-out operation controlled with a marine combustor  
Permit Type: Initial Installation  
Permit Fee: \$3,150.00  
Issue Date: 5/4/2015  
Effective Date: 5/4/2015  
Expiration Date: 5/4/2025  
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Arrow Material Services  
222 Dragstrip Rd  
Belpre, OH 45714

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

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

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

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0117859  
 Permit Description: Permit-to-install and operate for a condensate stabilization facility and barge load-out operation controlled with a marine combustor

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: P003**  
 Company Equipment ID: Flare  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P801**  
 Company Equipment ID: Equipment Leaks  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable

**Group Name: Condensate Storage Tanks**

|                                   |                |
|-----------------------------------|----------------|
| <b>Emissions Unit ID:</b>         | <b>T001</b>    |
| Company Equipment ID:             | T001           |
| Superseded Permit Number:         |                |
| General Permit Category and Type: | Not Applicable |
| <b>Emissions Unit ID:</b>         | <b>T002</b>    |
| Company Equipment ID:             | T002           |
| Superseded Permit Number:         |                |
| General Permit Category and Type: | Not Applicable |



**Final Permit-to-Install and Operate**  
Arrow Material Services  
**Permit Number:** P0117859  
**Facility ID:** 0684025003  
**Effective Date:** 5/4/2015

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



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



**Final Permit-to-Install and Operate**  
Arrow Material Services  
**Permit Number:** P0117859  
**Facility ID:** 0684025003  
**Effective Date:** 5/4/2015

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



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) B.4.-B.8.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.
2. Within six months of startup of the facility, the permittee shall collect and analyze a representative sample of the incoming liquids. The permittee shall use the results of the analysis to recalculate the emissions from the various components at the facility utilizing the GRI-GLYCalc or other standard software/emission factors. The permittee shall then compare the results of the revised calculation with the calculations submitted with the air pollution permit applications. If the emissions results are significantly different from those results submitted with the application, then the applicant shall submit the revised calculations to the appropriate District Office or Local Air Authority. The applicant should provide all input data used, the basis for each input value used and the results provided by the program.
3. Emissions units T001 and T002 contained in this permit are subject to 40 CFR Part 60, Subpart Kb. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA, Southeast District Office.
4. The permit-to-install and operate (PTIO) application for emissions units J001 and P003 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
  - a) the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - (1) threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or



(2) STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b) The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c) This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV (ug/m}^3\text{)}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{MAGLC}$$

d) The following summarizes the results of dispersion modeling for the "worst case" toxic contaminant:

Toxic Contaminant: hexane

TLV (mg/m<sup>3</sup>): 176.24

Maximum Hourly Emission Rate (lbs/hr): 4.82

Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 64.38

MAGLC (ug/m<sup>3</sup>): 4,196.12

The permittee has demonstrated that emissions of hexane from emissions units J001 and P003 are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

5. Prior to making any physical changes to or changes in the method of operation of the emissions units, that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a) changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b) changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c) physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

6. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
  - a) a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b) the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c) a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d) the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
7. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
8. The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
9. If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act") no later than the date on which a regulated substance is first present above a threshold quantity in a process.
10. Any waste generated by the permittee must be evaluated per OAC rule 3745-52-11 to determine if it is a hazardous waste. All waste determined to be hazardous waste must be managed in accordance with federal and state hazardous waste laws and rules.



**Final Permit-to-Install and Operate**  
Arrow Material Services  
**Permit Number:** P0117859  
**Facility ID:** 0684025003  
**Effective Date:** 5/4/2015

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



**1. J001, Barge Loading Operations**

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

Load-out of stabilized condensate from Condensate Storage Tank #2 (EU T002) controlled with a marine combustor (enclosed flare); maximum annual barge load-out rate of 122,640,000 gallons of stabilized condensate

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| a. | ORC 3704.03(T) and OAC rule 3745-31-05(A)(3), as effective June 30, 2008 | Volatile organic compound (VOC) emissions from the stack serving this emissions unit shall not exceed 6.30 pounds per hour.<br><br>VOC emissions shall not exceed 14.93 tons per year.<br><br>See c)(1) below.                                      |
| b. | OAC rule 3745-31-05(A)(3), as effective June 30, 2008                    | Nitrogen oxide (NO <sub>x</sub> ) emissions shall not exceed 0.34 ton per month averaged over a twelve-month rolling period.<br><br>Carbon monoxide (CO) emissions shall not exceed 0.71 ton per month averaged over a twelve-month rolling period. |



|    | Applicable Rules/Requirements                                | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
|    |  | See b)(2)a. below.  |
| c. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008 | The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO <sub>x</sub> and CO emissions from this air contaminant source since the potential to emit is less than 10 tons/year.<br><br>See b)(2)b. below. |

(2) Additional Terms and Conditions

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

c) Operational Restrictions

- (1) The permittee shall install a closed vent system designed to capture at least 95% of the VOC emissions from the barge loading operation, and shall vent the captured emissions to an enclosed flare with a design control efficiency of at least 99%.
- (2) The permittee shall burn only propane (pilot and enrichment/assist gas), natural gas, and vapor stream emissions from barge loading in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee or a representative shall perform a visual and olfactory inspection of each barge prior to beginning the condensate loading process. The purpose of the inspections is to ensure there are no natural draft openings (NDOs) in the barge that would allow for the fugitive emission of VOC in excess of five percent.
- (2) The permittee shall maintain records of the following information:
  - a. the date and reason any required barge inspection was not performed;
  - b. the date of each barge inspection where it was determined by the permittee that it was necessary to implement control measures to eliminate NDOs;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented.



The information required in d)(2)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the marine combustor, for any 3-hour block of time when the emissions unit(s) controlled by the marine combustor is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance. Until compliance testing has been conducted, the marine combustor shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.
- (4) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the combustion temperature within the marine combustor when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than three years.
- (5) Whenever the monitored average combustion temperature within the marine combustor deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
  - a. the date and time the deviation began;
  - b. the magnitude of the deviation at that time;
  - c. the date the investigation was conducted;
  - d. the name(s) of the personnel who conducted the investigation; and
  - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;



- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (6) For each day during which the permittee burns a fuel other than propane (pilot and enrichment/assist gas), natural gas or vapor stream emission emissions from barge loading, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each period of time (start time and date, and end time and date) when the 3-hour average combustion temperature within the marine combustor was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration; and



- ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the vapor stream emissions were not vented to the marine combustor with a capture efficiency of 95% and a control efficiency of 99% for VOC emissions;
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than propane (pilot and enrichment/assist gas), natural gas or vapor stream emissions from barge loading 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 b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

- VOC emissions from the stack serving this emissions unit shall not exceed 6.30 pounds per hour.

- Applicable Compliance Method:

- Compliance with the pound per hour emissions limitation shall be demonstrated based upon the testing requirements specified in f)(2).

- b. Emissions Limitations:

- VOC emissions shall not exceed 14.93 tons per year.

- Applicable Compliance Method:

- Compliance with the annual VOC emissions limitation is demonstrated by the following calculations based on the information presented in the permittee's application:



$$\begin{aligned}
\text{VOC (tons/yr)} &= \text{[[uncontrolled VOC emissions from barge loading, in tons/yr X capture efficiency of collection system X (1 - control efficiency of enclosed flare)] + (uncontrolled VOC emissions from barge loading, in tons/yr X (1-capture efficiency)] + [(maximum vapor stream fuel input rate, in million BTU/yr X VOC emissions factor, in lb VOC/million BTU) + (maximum pilot gas fuel input rate, in million BTU/yr X VOC emissions factor, in lb VOC/million BTU) + (maximum enrichment/assist gas fuel input rate, in million BTU/yr X VOC emissions factor, in lb VOC/million BTU)] X 1 ton/2,000 lbs]} \\
&= \text{[[(247.03 tons VOC/yr X 95% X (1-0.99)) + (247.03 tons/yr X (1-0.95)] + [(41,008 million BTU/yr X 0.005392 lb VOC/million BTU) + (265 million BTU/yr X 0.01093 lb VOC/million BTU) + (21,224 million BTU/hr X 0.01093 lb VOC/million BTU)] X 1 ton/2,000 lbs]} \\
&= \text{2.35 tons/yr + 12.35 tons/yr + [(221 lbs + 2.9 lbs + 232 lbs) X 1 ton/2,000 pounds]} \\
&= \text{14.93 tons VOC/yr}
\end{aligned}$$

Where:

247.03 tons/yr = uncontrolled VOC emissions from barge loading; based on multiplying the maximum annual throughput rate of condensate (122,640 Mgal) by the loading loss calculated per Equation 1 of AP-42 Chapter 5.2 (7/08) using daily average temperatures and vapor pressures (4.03 lb VOC/Mgal) and 1 ton/2,000 lbs;

95% = capture efficiency of collection system;

99% = VOC control efficiency of enclosed flare;

41,008 million BTU/yr = maximum annual vapor stream fuel input rate;

265 million BTU/yr = maximum annual pilot gas fuel input rate;

21,224 million BTU/yr = maximum annual enrichment/assist gas fuel input rate;

0.005392 lb VOC/million BTU = VOC emissions factor for vapor stream fuel, based on AP-42 Table 1.4.2 (7/98), normalized based on the high heating value of natural gas of 1,020 BTU/scf; and

0.01093 lb VOC/million BTU = VOC emissions factor for propane pilot fuel and enrichment/assist gas, based on AP-42 Table 1.5-1 (7/08), normalized based on the high heating value of propane of 91.5 million BTU/Mgal.



c. Emissions Limitation:

NO<sub>x</sub> emissions shall not exceed 0.34 ton per month averaged over a twelve-month rolling period.

Applicable Compliance Method:

Compliance with the emissions limitation is demonstrated by the following calculation based on the information presented in the permittee's application:

NO<sub>x</sub> (ton per month averaged over a twelve-month rolling period)

$$= [(NO_x \text{ emissions factor for propane fuel, in lb/million BTU} \times \text{maximum annual propane input to pilot, in million BTU/yr}) + (NO_x \text{ emissions factor for propane fuel, in lb/million BTU} \times \text{maximum annual enrichment/assist gas input to flare, in million BTU/yr}) + (NO_x \text{ emissions factor for flare, in lb/Mgal loaded} \times \text{maximum annual barge loading rate, in Mgal/yr})] \times 1 \text{ ton}/2,000 \text{ pounds} \times 1 \text{ year}/12 \text{ months}$$

$$= [(0.142 \text{ lbs NO}_x/\text{million BTU} \times 265 \text{ million BTU/yr}) + (0.142 \text{ lb NO}_x/\text{million BTU} \times 21,224 \text{ million BTU/yr}) + (0.0417 \text{ lb/Mgal} \times 122,640 \text{ Mgal/yr})] \times 1 \text{ ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months}$$

$$= [37.63 \text{ lbs/yr} + 3,013.81 \text{ lbs/yr} + 5,114.09 \text{ lbs/yr}] \times 1 \text{ ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months}$$

$$= 0.34 \text{ ton per month}$$

Where:

265 MMBtu/yr = maximum annual propane fuel input to pilot;

21,224 million BTU/yr = maximum annual propane enrichment/assist gas input to flare;

0.142 lb/million BTU = NO<sub>x</sub> emissions factor for propane from AP-42 Table 1.5-1 (7/08);

122,640 Mgal/yr = maximum annual barge loading rate; and

0.0417 lb/Mgal = NO<sub>x</sub> emissions factor for flared gas based on manufacturer's specification, converted from mg/L to lb/Mgal.

d. Emissions Limitation:

CO emissions shall not exceed 0.71 ton per month averaged over a twelve-month rolling period.



Applicable Compliance Method:

Compliance with the emissions limitation is demonstrated by the following calculation based on the information presented in the permittee's application:

CO (ton per month averaged over a twelve-month rolling period)

$$\begin{aligned} &= \text{[(CO emissions factor for propane fuel, in lb/million BTU X maximum annual input to pilot, in million BTU/yr) + (CO emissions factor for propane fuel, in lb/million BTU X maximum annual enrichment/assist gas input to flare, in million BTU/yr) + (CO emissions factor for flare, in lb/Mgal loaded X maximum annual barge loading rate, in Mgal/yr)] X 1 ton/2,000 pounds X 1 year/12 months} \\ &= \text{[(0.082 lb CO/million BTU X 265 million BTU/yr) + (0.082 lb CO/million BTU X 21,224 million BTU/yr) + (0.125 lb/Mgal X 122,640 Mgal/yr)] X 1 ton/2,000 lbs X 1 year/12 months} \\ &= \text{[21.73 lbs/yr + 1,740.37 lbs/yr + 15,330 lbs/yr] X 1 ton/2,000 lbs X 1 year/12 months} \\ &= \text{0.71 ton per month} \end{aligned}$$

Where:

265 million BTU/yr = maximum annual propane fuel input to pilot;

21,224 million BTU/yr = maximum annual enrichment/assist gas input to flare;

0.082 lb/million BTU = CO emissions factor for propane from AP-42 Table 1.5-1 (7/08);

122,640 Mgal/yr = maximum annual barge loading rate; and

0.13 lb/Mgal = CO emissions factor based on manufacturer's specification, converted from mg/L to lb/Mgal.

- (2) 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 3 months after start-up.
  - b. The emission testing shall be conducted to demonstrate compliance with the control efficiency limitations for VOC emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

VOC emissions 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.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- 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. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
- (1) None.



**2. P003, Facility Flare #1**

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

Air-assisted elevated open flare used to control process flashing emissions from two stabilizer units (either directly vented or vented through EUs T001 and T002); maximum flare gas throughput of 219 million scf/year

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

|    | Applicable Rules/Requirements                | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| a. | ORC 3704.03(T) and OAC rule 3745-31-05(A)(3) | Volatile organic compound (VOC) emissions from P003, T001 and T002, combined, shall not exceed 40.80 pounds per hour and 71.53 tons per year.<br><br>Nitrogen oxides (NO <sub>x</sub> ) emissions from this emissions unit shall not exceed 4.60tons per month averaged over a twelve-month rolling period.<br><br>Carbon monoxide (CO) emissions from this emissions unit shall not exceed 7.02tons per month averaged over a twelve-month rolling period.<br><br>See c)(1) below. |
| b. | 40 CFR Part 60, Subpart A                    | See Section C.3.b)(1)e.   |



|  | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures |
|--|--|---|
|  | (40 CFR 60.18)<br>General control device and work practice requirements for flares |   |

- (2) Additional Terms and Conditions
  - a. None.
- c) Operational Restrictions
  - (1) The permittee shall burn only natural gas and process flash gas with a minimum average daily heat content of 600 BTU/scf in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall properly install, operate, and maintain devices to continuously monitor the process flash gas flow rate and process flash gas heat content when the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
  - (2) The permittee shall maintain daily records of the following information:
    - a. total flow rate of process flash gas vented to the flare, in scf/day; and
    - b. the daily average heat content of the process flash gas (Btu/scf).
- e) Reporting Requirements
  - (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
  - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or process flash gas with a minimum heat content of 600 BTU/scf 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 b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emissions Limitation:

The permittee shall burn only natural gas and process flash gas with a minimum average daily heat content of 600 BTU/scf in this emissions unit.

Applicable Compliance Method:

Compliance with the heat content restriction is demonstrated by the recordkeeping in d)(2).

b. Emissions Limitations:

VOC emissions shall not exceed 40.80 pounds per hour and 71.53 tons per year.

Applicable Compliance Method:

Compliance with the short-term and annual VOC emissions limitations is demonstrated by the following calculations based on the information presented in the permittee's application:

VOC (lbs/hr)

$$= \text{[(VOC emissions factor for natural gas fuel, in lb/million scf X maximum annual natural gas input of pilot and purge gas, in scf/hr X 1 million scf/1,000,000 scf) + (flared material heat input, in mmBTU/hr X flare gas combustion emission factor, in lb/mmBTU) X 1 ton/2,000 lbs] + (total VOC content of flared gas, in lb/hr X (1-control efficiency))}$$

$$= \text{[(5.5 lbs VOC/million scf X 192.45 scf/hr X 1 million scf/1,000,000 scf) + (184.80 million BTU/hr X 0.00539 lb VOC/million BTU)] + (7,965.20 lbs/hr X (1-0.995))}$$

$$= \text{[(0.001 + 1.0)] + 39.83 lbs/hr}$$

$$= \text{40.80 pounds per hour}$$

Where:

192.45 scf/hr = maximum annual fuel input of pilot and purge gas per permittee's application;

5.5 lbs/million scf = VOC emissions factor from AP-42 Table 1.4-1 (7/98);

184.80 million BTU/hr = maximum annual material heat input from process flash gas per permittee's application;

0.00539 lb/million BTU = VOC emissions factor from AP-42 Table 1.4-2 (7/98) normalized to lb/MMBtu by dividing by the heat content of natural gas of 1,020 Btu/scf;



7,965.20 lb/hr = maximum uncontrolled VOC routed to the flare, as presented in the permittee's application; and

0.995 = VOC control efficiency of flare, as presented in the permittee's application, for flared gas heat content greater than 600 Btu/scf.

VOC (tons/yr)

$$= \left[ \left( \text{VOC emissions factor for natural gas fuel, in lb/million scf} \times \text{maximum annual natural gas input of pilot and purge gas, in scf/yr} \times 1 \text{ million scf} / 1,000,000 \text{ scf} \right) + \left( \text{flared material heat input, in mmBTU/yr} \times \text{flare gas combustion emission factor, in lb/mmBTU} \right) \times 1 \text{ ton} / 2,000 \text{ lbs} \right] + \left( \text{total VOC content of flared gas, in TPY} \times (1 - \text{control efficiency}) \right)$$

$$= \left[ \left( 5.5 \text{ lbs VOC/million scf} \times 1,685,871 \text{ scf/yr} \times 1 \text{ million scf} / 1,000,000 \text{ scf} \right) + \left( 647,651 \text{ million BTU/yr} \times 0.00539 \text{ lb VOC/million BTU} \right) \times 1 \text{ ton} / 2,000 \text{ lbs} \right] + \left( 13,955 \text{ TPY} \times (1 - 0.995) \right)$$

$$= \left[ (9.27 + 3,490.84) \times 1 \text{ ton} / 2,000 \text{ lbs} \right] + 69.78 \text{ TPY}$$

$$= 71.53 \text{ tons per year}$$

Where:

1,685,871 scf/yr = maximum annual fuel input of pilot and purge gas per permittee's application;

5.5 lbs/million scf = VOC emissions factor from AP-42 Table 1.4-1 (7/98);

647,651 million BTU/yr = maximum annual material heat input from process flash gas per permittee's application;

0.00539 lb/million BTU = VOC emissions factor from AP-42 Table 1.4-2 (7/98) normalized to lb/MMBtu by dividing by the heat content of natural gas of 1,020 Btu/scf;

13,955 tpy = maximum uncontrolled VOC routed to the flare, as presented in the permittee's application; and

0.995 = VOC control efficiency of flare, as presented in the permittee's application, for flared gas heat content greater than 600 Btu/scf.

c. Emissions Limitation:

NO<sub>x</sub> emissions from this emissions unit shall not exceed 4.60 tons per month averaged over a twelve-month rolling period.



Applicable Compliance Method:

Compliance with the NO<sub>x</sub> emissions limitation is demonstrated by the following calculations as presented in the permittee's application:

NO<sub>x</sub> (tons per month averaged over a twelve-month rolling period)

$$\begin{aligned}
 &= [(NO_x \text{ emissions factor for natural gas fuel, in lb/million scf} \times \text{maximum annual natural gas input to pilot, in scf/yr} \times 1 \text{ million scf}/1,000,000 \text{ scf}) + \\
 &\quad (NO_x \text{ emissions factor for high-BTU waste streams, in lb/million BTU} \times \text{maximum annual flared gas input to flare, in million BTU/yr})] \times 1 \\
 &\quad \text{ton}/2,000 \text{ pounds} \times 1 \text{ year}/12 \text{ months} \\
 &= [(100 \text{ lbs NO}_x\text{/million scf} \times 1,685,871 \text{ scf/yr} \times 1 \text{ million scf}/1,000,000 \text{ scf}) \\
 &\quad + (0.17 \text{ lb NO}_x\text{/million BTU} \times 647,651 \text{ million BTU/yr million BTU/yr})] \times 1 \\
 &\quad \text{ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months} \\
 &= [168.59 \text{ lbs/yr} + 110,100.67 \text{ lbs/yr}] \times 1 \text{ ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months} \\
 &= 4.60 \text{ tons per month}
 \end{aligned}$$

Where:

1,685,871 scf/yr = maximum annual fuel input of pilot and purge gas per permittee's application;

100 lbs/million scf = NO<sub>x</sub> emissions factor from AP-42 Table 1.4-1 (7/98);

647,651 million BTU/hr = maximum annual material heat input from process flash gas per permittee's application

0.17 lb/million BTU = NO<sub>x</sub> emissions factor from TNRCC RG-109, Table 5, 99.5 percent DRE flare factors (10/00).

d. Emissions Limitation:

CO emissions from this emissions unit shall not exceed 7.02 tons per month averaged over a twelve-month rolling period.

Applicable Compliance Method:

Compliance with the CO emissions limitation is demonstrated by the following calculations as presented in the permittee's application:

CO (tons per month averaged over a twelve-month rolling period)

$$\begin{aligned}
 &= [(CO \text{ emissions factor for natural gas fuel, in lb/million scf} \times \text{maximum annual natural gas input to pilot, in scf/yr} \times 1 \text{ million scf}/1,000,000 \text{ scf}) + \\
 &\quad (CO \text{ emissions factor for high-BTU waste streams, in lb/million BTU} \times \text{maximum annual flared gas input to flare, in million BTU/yr})] \times 1 \\
 &\quad \text{ton}/2,000 \text{ pounds} \times 1 \text{ year}/12 \text{ months}
 \end{aligned}$$



maximum annual flared gas input to flare, in million BTU/yr] X 1 ton/2,000 pounds X 1 year/12 months

$$= [(84 \text{ lb CO/million scf} \times 1,685,871 \text{ scf/yr} \times 1 \text{ million scf}/1,000,000 \text{ scf}) + (0.26 \text{ lb CO/million BTU} \times 647,651 \text{ million BTU/yr})] \times 1 \text{ ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months}$$

$$= [141.61 \text{ lbs/yr} + 168,389.26 \text{ lbs/yr}] \times 1 \text{ ton}/2,000 \text{ lbs} \times 1 \text{ year}/12 \text{ months}$$

$$= 7.02 \text{ tons per month}$$

Where:

1,685,871 scf/yr = maximum annual fuel input of pilot and purge gas per permittee's application;

84 lbs/million scf = CO emissions factor from AP-42 Table 1.4-1 (7/98);

647,651 million BTU/yr = maximum annual material heat input from process flash gas per permittee's application; and

0.26 lb/million BTU = CO emissions factor from TNRCC RG-109, Table 5, 99.5 Percent DRE Flare Factors (10/00)

g) Miscellaneous Requirements

- (1) None.



**3. P801, Fugitive Equipment Leaks**

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

Equipment leaks from various equipment components, including connectors, flanges, pump seals, valves, separators, pressure relief devices, open end valves or lines, piping, etc.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements                          | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3), as effective 6/30/08        | <p>Volatile organic compound (VOC) emissions shall not exceed 0.073 ton per month averaged over a twelve month rolling period.</p> <p>See b)(2)a. below.</p>   |
| b. | OAC rule 3745-31-05(A)(2)(a)(ii), as effective 6/30/08 | <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr. taking into account the voluntary restriction from OAC rule 3745-31-05(E).</p> <p>See b)(2)b. below.</p> |
| c. | OAC rule 3745-31-05(E) June 30, 2008                   | VOC emissions shall not exceed 0.073 ton per month averaged over a twelve  |



|    | Applicable Rules/Requirements   | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
|    |   | month rolling period.<br><br>See d)(2) below.  |
| d. | 40 CFR Part 60, Subpart OOOO,<br>(40 CFR 60. 5360 – 60.5430)<br><br>[In accordance with 40 CFR<br>60.5365(d)(1), this emissions unit<br>includes single continuous bleed<br>natural-gas driven pneumatic<br>controllers operating at a natural gas<br>bleed rate greater than 6 scfh in the<br>oil production segment between the<br>wellhead and point of custody<br>transfer to an oil pipeline subject to<br>the emissions limitations/control<br>measures specified in this section.] | Each pneumatic controller constructed<br>after October 14, 2013, must have a<br>bleed rate less than or equal to 6 scfh.<br>[40 CFR 60.5390(c)(1)]<br><br>See b)(2)c. below.           |
| e. | 40 CFR Part 60.1 – 19<br>(40 CFR 60.4246)   | Table 3 to Subpart OOOO of 40 CFR Part<br>60 – Applicability of General Provisions to<br>Subpart OOOO shows which part of the<br>General Provisions in 40 CFR Part 60.1 –<br>19 apply. |

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio State Implementation Plan SIP.
- c. Initial compliance for each pneumatic controller must be demonstrated by compliance with the requirements in (d)(1) through (6) of 60.5410(d), and continuous compliance for each pneumatic controller must be demonstrated by compliance with the requirements in (d)(1) through (3) of 40 CFR 60.5415(d).

c) Operational Restrictions

- (1) None.



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, including the following sections:

|                                   |   |
|-----------------------------------|---|
| 60.5390(c)(2)                     | Tag each pneumatic controller with the month and year of installation and identification information to allow traceability of the records for each controller   |
| 60.5390(f) and 60.5420(c)(4)(i)   | Maintain records of the date, location and manufacturer specifications for each pneumatic controller constructed, modified or reconstructed   |
| 60.5390(f) and 60.5420(c)(4)(ii)  | Maintain records of the demonstration that the use of pneumatic controller affected facilities with a natural gas bleed rate greater than the applicable standard is required and the reasons why   |
| 60.5390(f) and 60.5420(c)(4)(iii) | If the pneumatic controller is not located at a natural gas processing plant, maintain records of the manufacturer's specifications indicating that the controller is designed such that natural gas bleed rate is less than or equal to 6 standard cubic feet per hour |
| 60.5390(f) and 60.5420(c)(4)(iv)  | Maintain records of deviations in cases where the pneumatic controller was not operated in compliance with the requirements specified in §60.5390.  |

- (2) The permittee shall perform weekly inspections, when the facility is in operation, for indications of releases from the pressure relief valves, and any olfactory, visual or auditory indications of equipment leaks. The positive indication of a release or a leak shall be noted in an operations log, along with the following information:
- a. the name of the inspector;
  - b. the date and time inspected;
  - c. the identification of the pressure relief valve that released and/or piece of equipment that leaked;



- d. the estimated or calculated duration of the pressure relief valve release and/or equipment leak and the estimated emission totals; and
- e. any corrective actions taken to minimize or eliminate the release or leak.

e) Reporting Requirements

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

|  |   |
|--|---|
| 60.7(a)(1), (3) and (4), 60.5390(f), and 60.5420(a)(1) | Initial notifications not required for pneumatic controller affected facilities.  |
| 60.5390(f) and 60.5420(b)                              | Submit annual reports containing the information in 40 CFR 60.5420(b)(5) for each pneumatic controller. 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 |

f) Testing Requirements

- (1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

VOC emissions shall not exceed 0.073 ton per month averaged over a twelve month rolling period.

Applicable Compliance Method:

The annual VOC limitation is the estimated potential-to-emit based upon the maximum number of components and type of service (gas/vapor and light liquid) expected at the condensate stabilization facility. Unless or until more accurate emission factors have been demonstrated or established for the site (e.g.



following initial and subsequent monitoring and inspections), the appropriate emissions factors from EPA Protocol for Equipment Leak Emission Estimates, Office of Air Quality, Planning and Standards, Research Triangle Park, NC 27711. EPA-453/R-95-017 November 1995, Table 2-3 Marketing Terminal Average Emission Factors, shall be used to demonstrate compliance with the annual limit. The facility's potential emissions from ancillary and associated equipment shall be documented from the summation of the following calculations:

Component Type # of components x emission factor x % VOC\* = lb VOC/hr

In Gas/Vapor Service

Number of valves (291) x 0.0000287lb/component/hrx 92% VOC = lb VOC/hr

Number of fittings/connectors(582) x 0.0000926lb/component/hrx 92% VOC = lb VOC/hr

Number of other components (includes pneumatic controllers; 8) x 0.000265 lb/component/hr x 92% VOC = lb VOC/hr

In Light Liquid Service

Number of valves (807) x 0.0000948lb/component/hrx 99.8% VOC = lb VOC/hr

Number of pump seals (32) x 0.00119lb/component/hrx 99.8% VOC = lb VOC/hr

Number of fittings/connectors (1,517) x 0.0000176 lb/component/hr x 99.8% VOC = lb VOC/hr

Number of open ended lines (2) x 0.000287lb/component/hrX 99.8% VOC = lb VOC/hr

The total summation of VOC emissions per hour shall be multiplied by 8,760 hours per year and divided by 2,000 pounds and 12 months to calculate the ton per month estimated annual fugitive VOC emissions.

\* VOC content analysis of gas/vapor and light liquids as presented in the permittee's application

Compliance shall be demonstrated by actual component counts installed, and the number shall not increase from these levels by any more than 10 percent.

g) Miscellaneous Requirements

- (1) None.



**4. Emissions Unit Group - Condensate Storage Tanks: T001, T002**

| EU ID | Operations, Property and/or Equipment Description  |
|-------|--|
| T001  | Condensate Storage Tank #1 -60,000 bbl tank storing condensate unloaded from trucks prior to stabilization with working and breathing losses from the stored liquid minimized or eliminated due to the maintenance of flash gas within the tank vapor space with displaced flash gas collected by a closed vent system and routed to the process flare (EU P003); maximum annual throughput of 137,970,000 gallons |
| T002  | Condensate Storage Tank #2 -60,000 bbl tank storing condensate prior to barge loading after stabilization with working and breathing losses from the stored liquid minimized or eliminated due to the maintenance of flash gas within the tank vapor space with displaced flash gas collected by a closed vent system and routed to the process flare (EU P003); maximum annual throughput of 122,640,000 gallons  |

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements                                | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| a. | OAC rule 3745-31-05(A)(3), as effective June 30, 2008        | The requirements of this rule are equivalent to the requirements of OAC 3745-31-05(E), OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.<br><br>See b)(2)a. below. |
| b. | OAC rule 3745-31-03(A)(3)(a)(ii), as effective June 30, 2008 | The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant                            |



|    | Applicable Rules/Requirements   | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
|    |   | source since the calculated annual emission rate is less than 10 tons/yr. taking into account the voluntary restriction from OAC rule 3745-31-05(E).<br><br>See b)(2)b. below.   |
| c. | OAC rule 3745-31-05(E), as effective June 30, 2008  | The permittee shall maintain a blanket of natural gas or process stabilizer gas in the vapor space of the storage tanks at all times, and shall route all gas from the tanks to the facility flare (EU P003).<br><br>See Section C.2.b)(1)a. |
| d. | OAC rule 3745-21-09(L)  | The requirements of this rule are equivalent to the requirements of 40 CFR Part 60, Subpart Kb, except as identified in c)(1), d)(1)-(2) and e)(3) below.  |
| e. | 40 CFR Part 60, Subpart Kb<br>(40 CFR 60.110b – 60.117b)<br><br>[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 c)(2) below.   |
| f. | 40 CFR Part 60, Subpart A (40 CFR 60.1-19)  | General Provisions   |

(2) Additional Terms and Conditions

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



c) Operational Restrictions

- (1) The permittee shall equip all openings, except stub drains, with a cover, seal or lid which is in a closed position at all times except when in actual use for tank gauging or sampling.
- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart Kb, including the following sections:

|  |  |
|--|--|
| 60.112b(a)(3) (T001 and T002) and 60.112b(b)(1) (T001) | Equip each storage vessel with a closed vent system and control device that meets the specifications of 60.112b(a)(3).   |
| 60.112b(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 as determined in 40 CFR 60.485(b). |
| 60.112(a)(3)(ii) 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)(ii) and 60.18(c)(5)            | Comply with the heat content specifications in 60.18(c)(3)(ii) and the maximum tip velocity specifications in 60.18(c)(5).   |
| 60.113b(d) and 60.18(e)                                | Operate the flare at all times when emissions may be vented to it.   |

- (3) The permittee shall maintain a natural gas or process stabilizer gas blanket on this emissions unit at all times. The presence of a blanket shall be demonstrated by



maintaining the average tank pressure between 2" water column (vacuum) and 3.5" water column as an hourly average.

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

- (1) The permittee shall maintain records of the types of petroleum liquids stored in the tank and the maximum true vapor pressure (in psia), as stored, or each liquid with a maximum true vapor pressure greater than 1.0 psia.
- (2) The permittee shall maintain a record of any period of time the fixed roof tank does not comply with the requirements of OAC rule 3745-21-09(L)(1).
- (3) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 60, Subpart Kb, including the following sections:

|                           |   |
|---------------------------|---|
| 60.115b(d)(2)             | Keep records of all periods of operation during which the pilot flame is absent.  |
| 60.116b(a) and 60.116b(b) | Keep copies of all records for at least two years, except records of the dimension of the storage vessel and analysis showing the capacity of the storage vessel shall be kept for the life of the source.  |
| 60.18(d)                  | Monitor control devices to ensure they are operated and maintained in conformance with their design.  |
| 60.18(f)(2)               | Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device.  |
| 60.18(f)(3), (4) and (6)  | Calculate the net heating value of the gas being combusted using the equation in 60.18(f)(3), the actual exit velocity of the flare using the methods in 60.18(f)(4) and the maximum permitted exit velocity for the flare using the equation in 60.18(f)(6). |

- (4) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure within this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day this emissions unit is in operation:



- a. all hours of time when this emissions unit was in operation, during which the average pressure within the tank was outside the range specified in c)(3).

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall notify the director (the appropriate Ohio EPA district office or local air agency) of any noncompliance with the design and operating requirements of OAC rule 3745-21-09(L)(1) within 30 days of the occurrence.
- (4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Kb, 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. |
| 60.115b(d)(1) | Submit a report to the Administrator containing the measurements required by 60.18(f)(1) – (f)(6) within 6 months of the initial start-up date.   |
| 60.115b(d)(3) | Submit semiannual reports identifying all periods of operation when the pilot flame was absent.   |

f) Testing Requirements

- (1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:

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.



Applicable Compliance Method:

Compliance with the control device requirements is demonstrated by the monitoring requirements in d)(3).

b. Emissions Limitation:

The permittee shall maintain a blanket of natural gas or process stabilizer gas in the vapor space of the storage tanks at all times, and shall route all gas from the tanks to the facility flare (EU P003).

Applicable Compliance Method:

Compliance with the voluntary restriction is demonstrated by the monitoring requirements in d)(4).

c. Emissions Limitation:

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 as determined in 40 CFR 60.485(b).

Applicable Compliance Method:

Compliance with the closed vent system requirements shall be determined according to USEPA Method 21 calibrated each day of use using zero air (less than 10 ppm of hydrocarbon in air) and a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm. See f)(2).

d. Emissions Limitation:

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.

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 (60.18(f)(1)) and Subpart Kb (60.112b(a)(3)(i) and 60.113b(d)). 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 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 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 control device in 40 CFR 60.18(c)(1) and the



no detectable emissions limitation for the closed vent system in 40 CFR 60.112b(a)(3)(i).

- c. The following test method shall be employed to demonstrate compliance with the allowable emission rate:

Leaking sources – Method 21 of 40 CFR Part 60, Appendix A; and,  
Visible emissions - Method 22 of 40 CFR Part 60, Appendix A (with an observation period of 2 hours)

- 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.