John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/31/2013

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	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

Hondo Hanagan
Kensington Processing Plant
1099 Main Avenue
Suite 210
Durango, CO 81301

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0215002002
Permit Number: P0115555
Permit Type: OAC Chapter 3745-31 Modification
County: Columbiana

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

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

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Kensington Processing Plant

Facility ID:	0215002002
Permit Number:	P0115555
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	12/31/2013
Effective:	12/31/2013

Division of Air Pollution Control
Permit-to-Install
for
Kensington Processing Plant

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 8
9. Reporting Requirements 8
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 10
14. Public Disclosure 10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P006, CS/Loadout Flare 14
2. P801, Fugitive Equipment Leaks 28

Authorization

Facility ID:	0215002002
Facility Description:	Natural gas processing facility
Application Number(s):	A0048122, A0049387
Permit Number:	P0115555
Permit Description:	Chapter 31 modification to increase emissions from the CS/Loadout Flare (P006) and the fugitive equipment leaks (P801) due to facility equipment changes.
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$400.00
Issue Date:	12/31/2013
Effective Date:	12/31/2013

This document constitutes issuance to:

Kensington Processing Plant
11543 SR 644
Kensington, OH 44427

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, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0115555
Permit Description: Chapter 31 modification to increase emissions from the CS/Loadout Flare (P006) and the fugitive equipment leaks (P801) due to facility equipment changes.

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

Emissions Unit ID:	**P006**
Company Equipment ID:	Emissions units controlled by CS/Loadout Flare
Superseded Permit Number:	P0110251
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P801**
Company Equipment ID:	Fugitive Equipment Leaks
Superseded Permit Number:	P0110251
General Permit Category and Type:	Not Applicable

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, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, 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, Northeast 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, andreportingrequirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northeast 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 theOhio EPA DAPC, Northeast District Officein 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, Northeast 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, Northeast 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, Northeast 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 <u>obtained before</u>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 enteredupon 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.

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. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution: P006 and P801. The complete New Source Performance Standards (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 Ohio EPA Northeast District Office.

C. Emissions Unit Terms and Conditions

1. P006, CS/Loadout Flare

Operations, Property and/or Equipment Description:

Air-assisted open flare with a maximum heat input capacity of 4.5 mmBtu/hr but an annual average operating rate of 1.97 mmBtu/hr used to control the 14 – 31,500 gallon condensate stabilizer product tanks (T002 – T020) and truck loading return vapor (J001), along with emergency releases of hydrocarbon emissions from pressure relief devices.

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 11/30/01	Nitrogen oxides (NO_x) emissions shall not exceed 0.14 lb/hr and 0.59 TPY. Carbon monoxide (CO) emissions shall not exceed 0.73 lb/hr and 3.19 TPY. Volatile organic compound (VOC) emissions shall not exceed 0.51 ton per month averaged over a 12-month rolling period (including emissions from purge and pilot gas and de minimis units). See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.
c.	40 CFR Part 60, Subpart OOOO: Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (60.5360-60.5430) [In accordance with 40 CFR 60.5400, this emissions unit consists of a flare used to control leaks from pressure relief devices in a process unit in an onshore natural gas	The facility is subject to the applicable requirements of Subpart VVa for equipment leaks of VOC at a facility which commenced construction after August 23, 2011 per 60.5400 of Subpart OOOO. See b(2)c, b)(2)d, c)(3), d)(6) and e)(4). Following the compliance date of April 15, 2015 for Group 1 storage vessels*, and

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	processing plant, and a storage vessel affected facility.] 40 CFR Part 60, Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI) for which construction, reconstruction, or modification commenced after November 7, 2006. (40 CFR 60.18, 60.5400, 60.482-1a(a), (b), and (d), 60.482-10a)	April 15, 2014 or 60 days after startup (whichever is later) for Group 2 storage vessels**, each storage vessel with VOC emissions calculated to exceed 6 tons per year shall reduce VOC emissions by 95.0% or greater. [40 CFR 60.5395(d)(1)] See b)(2)j, c)(4) and d)(7).
d.	40 CFR Part 60.1 through 60.19	The General Provisions that apply are specified in Table 3 of 40 CFR Part 60, Subpart OOOO.
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	OAC rule 3745-17-11(B)	See b)(2)f.
g.	OAC rule 3745-21-09(L)(1)	Exempt pursuant to OAC rule 3745-21-09(L)(2)(b). See b)(2)g.
h.	40 CFR Part 60, Subpart Kb	See b)(2)h and b)(2)i.

*Group 1 storage vessels are those for which construction, modification or reconstruction has commenced after 8/23/11, and on or before 4/12/13.

** Group 2 storage vessels are those for which construction, modification or reconstruction has commenced after 4/12/13.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

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

c. No later than October 15, 2012 or upon startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in 60.5401.

d. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482–2a to 60.482–10a if it is identified as required in 40 CFR 60.486a(e)(5).

e. The emissions from the flare are exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

f. The uncontrolled mass rate of PE from the flare is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero.

g. A fixed roof tank meeting one of the following criteria is exempt from installing an internal floating roof or other control device and is not subject to the requirements identified in OAC 3745-21-09(L):

   i. a fixed roof tank with a capacity of less than 40,000 gallons; or

   ii. a fixed roof tank used to store crude oil and condensate prior to lease custody transfer and with a capacity of less than 422,000 gallons; or

   iii. a fixed roof tank that stores a petroleum liquid with a true vapor pressure less than or equal to 1.52 pounds per square inch absolute.

   If not meeting one of these exemptions the storage vessel shall be installed to comply with the control requirements of OAC rule 3745-21-09(L).

h. This emissions unit is exempt from the control requirements of 40 CFR 60.110b because it is a vessel with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.

i. If using a floating roof to reduce emissions, the storage vessel shall be operated to meet the requirements of 40 CFR 60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR Part 60, Subpart Kb.

j. The permittee shall calculate the potential for VOC emissions for each single storage vessel (defined in 40 CFR 60.5430) using an accepted model or calculation methodology. Emissions of VOC shall be based on the maximum average daily throughput determined for:

i. a 30-day period of production prior to 10/15/13 for storage vessels installed after 8/23/11 and on or before 4/12/13, i.e., Group 1 storage vessels; and/or

ii. a 30-day period of production prior to 4/15/14 or 30 days after startup for storage vessels installed after 4/12/13, i.e., Group 2 storage vessels.

Each subject storage vessel initially calculated to equal or exceed 6 tons per year that subsequently is determined to have potential VOC emissions at less than 6 tons per year, e.g. due to decreased flow, shall remain an affected facility under NSPS Subpart OOOO.

[40 CFR 60.5410(h)] and [40 CFR 60.5365(e)]

c) Operational Restrictions

(1) The permittee shall burn only natural gas as defined in 40 CFR 63.761 in this emissions unit, except during an emergency.

(2) All collected gas shall be vented to an open flare designed and operated as follows:

a. The flare shall be operated with a 95% destruction efficiency.

b. An automatic flame ignition system shall be installed.

c. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. If the pilot flame goes out and does not relight, then an alarm shall sound. The net heating value of the gas being combusted and the actual exit velocity shall be calculated as required in 40 CFR 60.18.

d. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.

e. Any flare, auto ignition system, and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

f. The flare shall operate at a maximum inlet gas flow rate determined by testing performed by the manufacturer. An inlet gas flow rate meter shall be installed and used to continuously monitor the flow.

g. There shall be no visible particulate emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A visible

emissions test using Method 22 at 40 CFR Part 60, Appendix A-7 must be performed monthly.

h. The flare shall operate at no more than a rolling, 12-month average 1.97 mmBtu/hr heat input at all times except for times when a malfunction occurs such that excess gas must be safely disposed of through the flare.

i. The flare shall comply with the applicable requirements of 40 CFR 60.18.

(3) For the pressure relief devices, 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) and 60.482-10a(a) through (d) and (m)	Meet the requirements of 60.482-10a for closed vent systems and control devices.
60.5400(a), 60.482-4a(c), 60.482-10a(a) and (d)	Flares shall comply with the requirements of 40 CFR Part 60 Section 60.18.
60.5400(a) and 60.482-10a(m)	Operate closed vent systems and control devices used to comply with provisions of 40 CFR 60.482-10a at all times when emissions may be vented to them.
60.5400(a) and 60.482-10a(g)	Repair all leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, from the closed vent systems and control devices as soon as practicable. First attempt at repair must be made no later than 5 calendar days after detection, and repair must be completed no later than 15 calendar days after detection, except as provided by rule (e.g., delay of repair, unsafe to inspect, difficult to inspect).
60.5400(a) and 60.482-10a(h)	Meet the requirements of 60.482-10a(h) for delays of repair.
60.5400(a) and 60.482-10a(i)	Vapor collection systems and closed vent systems operated under a vacuum are exempt from the inspection requirements of 60.482-10a(f).
60.5400(a) and 60.482-10a(j)	Meet the requirements of 60.482-10a(j) for parts of the closed vent system designated as unsafe to inspect in lieu of 60.482-10a(f).

60.5400(a) and 60.482-10a(k)	Meet the requirements of 60.482-10a(k) for parts of the closed vent system designated as difficult to inspect in lieu of 60.482-10a(f).

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

(4) For the storage tanks, the permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart OOOO, including the following sections:

60.5395(a), 60.5410(e)(3), and 60.5415(e)(1)	Operate the flare to achieve a 95% reduction of emissions of VOC from each storage vessel emitting more than 6 TPY. Emissions are to be determined per 60.5395(a).
60.5395(e) and 60.5411(b)	Equip the storage tanks with a cover connected through a closed vent system to the flare. The cover and all openings in the cover must form a continuous barrier over the entire surface area of the liquid in the storage vessel and must be secured in a closed, sealed position whenever material is stored in the storage vessels except as provided by rule.
60.5395(e) and 60.5411(b)(3)	Each storage vessel thief hatch shall be weighted and properly seated.
60.5395(e) and 60.5411(c)	Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to these requirements.
60.5395(e) and 60.5411(c)(2)	Design and operate the closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections.
60.5395(e) and 60.5411(c)(3)	For closed vent systems containing one or more bypass devices, either install a flow indicator or secure the bypass device valve in the non-diverting position using a car-seal or a lock–and-key type configuration.
60.5415(e)(3)(A) and 60.5416(c)(4), (5), (6), and (7)	Repair all leaks detected from the closed vent system or cover as soon as practicable. First attempt at repair must be made no later than <u>5 calendar days</u> after detection, and repair must be completed no later than <u>30 calendar days</u> after detection, except as provided by rule (e.g., delay of repair, unsafe to inspect, difficult to inspect). Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.

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

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas as defined in 40 CFR 63.671, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit, except during an emergency.

(2) The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

(3) The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design and the requirements contained in this permit.

(4) The permittee shall:

a. continuously monitor and record the presence of the pilot flame;

b. record all periods during which the automatic flare ignition system (pilot flame or electronic arc ignition system) was not working;

c. record all periods during which there was gas being vented to the flare but the flare was not lit;

d. record gas flow rate at the inlet to the flare at least once every hour, in lbs/hour;

e. record a summation of the gas flow rate at the inlet to the flare monthly, in lbs/month;

f. record a rolling, 12-month summation of the gas flow rate at the inlet to the flare monthly, in lbs/month; and

g. sample the gas stream monthly and record the VOC weight percentage.

(5) The permittee shall maintain a record of all periods of time (date and number of hours) when, due to emergency or upset condition, the flare is burning collected gases such that the rolling, 12-month average heat input is greater than 1.97 mmBtu/hr, along with a description of the emergency and/or the reason that the flare was used at a rolling, 12-month average heat input greater than 1.97 mmBtu/hr. The rolling, 12-month average heat input shall be calculated from the monitored flow rate and a maximum heating value of 0.023 mmBtu/lb.

(6) For the pressure relief devices, the permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.5400(a), 60.482-10a(e)	Monitor the control device to ensure it is operated and maintained in conformance with its design.
60.5400(a), 60.482-10a(f)(1) and (2), and 60.485a(b)	Inspect each closed vent system, except as provided by rule. If the vapor collection system or closed vent system is constructed of hard-piping, an initial inspection shall be performed according to 60.485a(b) (i.e., Method 21), and annual visual inspections shall be performed for visible, audible, or olfactory indications of leaks. If the vapor collection system or closed vent system is constructed of ductwork, initial and annual inspections shall be performed according to the procedures of 60.485a(b).
60.5400(a) and 60.482-10a(l)(1)	Maintain required records for parts of the closed vent system that are designated as unsafe to inspect.
60.5400(a) and 60.482-10a(l)(2)	Maintain required records for parts of the closed vent system that are designated as difficult to inspect.
60.5400(a) and 60.482-10a(l)(3)	Maintain required records for leaks and repairs of closed vent systems as specified in 60.486a(c).
60.5400(a) and 60.482-10a(l)(4) and (5)	Maintain required records for inspections.
60.5400(e) and 60.486a(d)	Maintain required records for the design requirements for closed vent systems and control devices.
60.5400(e) and 60.486a(e)	Maintain required log.
60.5421(b)	Maintain required records for pressure relief devices.

(7) For the storage vessels, the permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart OOOO, including the following sections:

60.5416(c)(1)	For each closed vent system, conduct monthly olfactory, visual and auditory inspections for defects including, but not limited to, visible cracks, holes or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. Monthly inspections must be separated by at least 14 calendar days.
60.5416(c)(2)	For each cover, conduct monthly olfactory, visual and auditory inspections for defects including, but not limited to, visible cracks, holes or gaps in the cover, or between the cover and the separator wall; broken, cracked or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. Monthly inspections must be separated by at least 14 calendar days.
60.5416(c)(3)	For each bypass device, except as provided for in Section 60.5411(c)(3)(ii), set the flow indicator to sound an alarm at the inlet to the bypass device when the stream is being diverted away, or visually inspect the seal or closure mechanism monthly to verify that the valve is maintained in the non-diverting position.
60.5417(d)(1)(iii) and 60.5415(e)(3)(i)(B)	Install, calibrate, operate, and maintain a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.
60.5417(c)(1)	Detect and record the presence of a flare flame at least <u>once every hour</u>.
60.5417(c)(2)	Install, calibrate, operate, and maintain the continuous monitoring systems in accordance with a site specific monitoring plan including the information required by rule.
60.5417(c)(3) and (4)	Conduct a continuous parameter monitoring systems equipment performance check, system accuracy audit, or other audit procedure as specified in the site-specific monitoring plan at least <u>once every 12 months</u>. Conduct performance evaluations of the continuous parameter monitoring systems as specified in the site-specific monitoring plan.
60.5417(g)(4)	Deviations for the flare occur when the monitoring data are not available for at least 75 percent of the operating hours in a day.
60.5417(g)(5)	Deviations for the bypass devices occur when the flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere, or if the seal or closure mechanism has

	been broken, the bypass line valve position has changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken.
60.5420(c)	The applicable records identified in 40 CFR 60.5420(c) and 40 CFR 60.7(f) must be maintained either onsite or at the nearest local field office for at least 5 years.
60.5420(c)(5)(ii)	Maintain records of each VOC emissions determination for each storage vessel affected facility including identification of the model or calculation methodology used to calculate the VOC emission rate.
60.5420(c)(5)(iii)	Maintain records of deviations.
60.5420(c)(5)(iv)	Maintain records for storage vessels that are skid-mounted or permanently attached to something that is mobile.
60.5420(c)(5)(v)	Maintain records of the identification and location of each storage vessel affected facility.
60.5420(c)(6)	Maintain required records for inspections of closed vent systems.
60.5420(c)(7)	Maintain required records for inspections of storage vessel covers.
60.5420(c)(8)	Maintain required records for inspections of the bypass or each time the key is checked out or each time the alarm is sounded.

(8) The permittee shall record the annual throughput of each tank in gallons per year. The permittee shall keep records of U.S. EPA TANKS software program and/or other process simulation program calculations used to demonstrate annual storage tank and process vent emissions. These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

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 submit deviation (excursion) reports that identify each day when a fuel other than natural gas as defined in 40 CFR 63.761 was burned in this emissions unit, except during an emergency. Each report shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all periods of time during which the pilot flame or electronic arc ignition system were not working and process gas was being vented to it;

b. all periods of time when, due to emergency or upset conditions, the flare is burning collected gases at greater than the rolling, 12-month average heat input of 1.97 mmBtu/hr;

c. all periods of time when the maximum inlet gas flow rate was not within the range determined by testing performed by the manufacturer;

d. the probable cause of each deviation (excursion);

e. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

f. 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, electronically through Ohio EPA Air Services, 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) For the pressure relief devices, the permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subparts A, OOOO and VVa, including the following sections:

60.5400(e) and 60.487a(a)	Submit semiannual reports beginning six months after the initial startup date.
60.5400(e) and 60.487a(b) and (c)	Initial and subsequent semiannual report requirements.
60.5422	Submit the required information for pressure relief devices.

(5) For the storage vessels, the permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart OOOO, including the following sections:

60.5420(a)(1)	Initial notifications are not required for storage vessels.
60.5410(e)(8), 60.5420(b)(1), and	Submit the required information for storage vessels in the initial annual report within 90 days of the end of the initial compliance period and in the subsequent reports due the

60.5420(b)(6)	same date each year as the initial annual report.
60.5420(b)(6)(i)	Submit an identification, including the location, of each storage vessel affected facility for which construction, modification or reconstruction commenced during the reporting period.
60.5420(b)(6)(ii)	Submit documentation of the VOC emission rate determination.
60.5420(b)(6)(iii)	Submit records of deviations.
60.5420(b)(6)(iv)	Submit a notification identifying each Group 1 storage vessel affected facility in the initial annual report.
60.5420(b)(6)(v)	Submit a statement that the requirements of 60.5410(h)(2) and (3) have been met.
60.5420(b)(6)(vi)	Submit an identification of each storage vessel affected facility that is removed from service.
60.5420(b)(6)(vii)	Submit an identification of each storage vessel affected facility for which operation resumes.

f) Testing Requirements

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

a. Emission Limitations:

NO_x emissions shall not exceed 0.14 lb/hr and 0.59 TPY.

Applicable Compliance Method:

The hourly emission rate specified above was established by multiplying the emission factor from AP-42, Table 13.5-1 (revised 1/95), of 0.068 $lbNO_x$/mmBtu by the maximum rolling, 12-month average heat input rate.

The TPY emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (0.13 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

If required, compliance with the hourly NO_x emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

b. Emission Limitations:

CO emissions shall not exceed 0.73 lb/hr and 3.19 TPY.

Applicable Compliance Method:

The emission rate specified above was established by multiplying the emission factor from AP-42, Table 13.5-1 (revised 1/95), of 0.37 lb CO/mmBtu by the maximum rolling, 12-month average heat input rate.

The TPY emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.73 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

If required, compliance with the hourly CO emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

c. Emission Limitation:

VOC emissions shall not exceed 0.51 ton per month averaged over a 12-month rolling period (including emissions from purge and pilot gas and de minimis units).

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be based upon the following calculation using the inputs provided in the permittee's application and the record keeping requirements in d)(4):

VOC (tons/mo) = (Inlet gas flow rate) X (VOC weight percentage) X (1 – flare destruction efficiency) X (ton/2000 lbs)

where:

Inlet gas flow rate = lbs/mo., including purge and pilot gas;

VOC weight percentage = percentage of VOC in the inlet gas stream (based on monthly sample analysis in d)(4)); and

Flare destruction efficiency = 95%.

d. Emission Limitation:

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:

Compliance with the visible emissions limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22. Method 22 shall be conducted monthly for a 2 hour observation period.

g) Miscellaneous Requirements

(1) Any amendment to 40 CFR Part 60, Subpart OOOO shall supersede the compliance limitations and/or options contained in this permit.

2. P801, Fugitive Equipment Leaks

Operations, Property and/or Equipment Description:

Fugitive VOC emissions from various equipment components, including valves, pumps, flanges, connectors, open-ended lines, drains/vents, pressure safety valves and sample points.

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 11/30/01	Fugitive emissions of volatile organic compounds (VOC) shall not exceed 0.69 ton per month averaged over a 12-month rolling period. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOOO. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.
c.	40 CFR Part 60, Subpart OOOO: Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (60.5360 - 60.5430) [In accordance with 40 CFR 60.5365, this emissions unit includes equipment associated with a liquefied natural gas unit located at an onshore natural gas processing plant.] 40 CFR Part 60, Subpart VVa: Standards of Performance for	The facility is subject to the applicable requirements of Subpart VVa for equipment leaks of VOC at a facility which commenced construction after August 23, 2011 per 40 CFR 60.5400 of Subpart OOOO. See b)(2)c, b)(2)d, b)(2)e, c)(5), d)(1) and e)(2).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI) for which construction, reconstruction, or modification commenced after November 7, 2006.	
d.	40 CFR Part 60.1 through 60.19	The General Provisions that apply are specified in Table 3 of 40 CFR Part 60, Subpart OOOO.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. These rule paragraphs apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC from this air contaminant source since the uncontrolled potential to emit for VOC is less than ten tons per year.

c. In accordance with 40 CFR Part 60, Subpart OOOO, the following pieces of equipment are affected facilities in a process unit in an onshore natural gas processing plant constructed after August 23, 2011. Fugitive leaks from the following equipment are covered by this permit and subject to the NSPS requirements: each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector in VOC service.

d. No later than October 15, 2012 or upon startup, the permittee shall demonstrate compliance with the applicable requirements of 40 CFR 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in 60.5401.

e. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482–2a to 60.482–10a if it is identified as required in 40 CFR 60.486a(e)(5).

c) Operational Restrictions

(1) Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

(2) New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

(3) To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves shall be identified in a list to be made available upon request. The non-accessible valves may be identified by one or more of the methods described below:

a. piping and instrumentation diagram (PID); or

b. a written or electronic database.

(4) New and reworked piping connections greater than 2 inches shall be welded or flanged. Screwed connections are permissible only on piping 2 inches in diameter or less. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 8 hours of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Compliance with the requirements of this condition does not assure compliance with requirements of NSPS or NESHAPS and does not constitute approval of alternate standards for these regulations.

(5) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subparts OOOO and VVa, including the following sections:

60.5400(f)	Each piece of equipment is presumed to be in VOC service or wet gas service unless demonstrated otherwise.
60.5400(a) and 60.482-2a(b)(2)(ii)	Designate visual indications of liquids dripping from a pump seal as a leak, and repair the leak using the procedures in 60.482-2a(c) or by eliminating the visual indications of liquids dripping.
60.5400(a) and 60.482-2a(c)(1)	Repair detected leaks from pumps in light liquid service not later than <u>15 calendar days</u> after detection, except as provided in 60.482-9a for delay of repair.

60.5400(a) and 60.482-2a(c)(2)	Attempt first repair of detected leaks from pumps in light liquid service within 5 calendar 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 in lieu of 60.482-2a(a).
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 500 ppm above background) in lieu of 60.482-2a(a), (c) and (d).
60.5400(a), 60.482-2a(g) and 60.486a(f)(1)	Meet the requirements of 60.482-2a(g) for pumps designated as unsafe to monitor in lieu of 60.482-2a(a) and (d)(4) – (6).
60.5400(a) and 60.482-4a	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 60.482-4a(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) and 60.482-6a(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 60.482-7(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	Meet the requirements of 60.482-9a for delays of repair.
60.5400(a) and 60.482-10a(a) through (d) and (m)	Meet the requirements of 60.482-10a for closed vent systems and control devices.
60.5400(a) and 60.482-10a(g)	Repair detected leaks from closed vent systems and control devices as soon as practicable, but not later than 15 calendar days after detection and attempt first repair within 5 days after each leak is detected.
60.5400(a) and 60.482-10a(h)	Meet the requirements of 60.482-10a(h) for delays of repair.

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

d) Monitoring and/or Recordkeeping Requirements

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

60.5400(a), 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(c) and (f) and 60.482-2a(d), (e) and (f).
60.5400(a) and	Visually inspect each pump in light liquid service each week for indications of liquids dripping from the pump seal, except

60.482-2a(a)(2)	as provided in 60.482-1a(f).
60.5400(a) and (d), 60.482-2a(b)(1) and 60.485a(b)(1)	Detect leaks from pumps in light liquid service at an instrument reading of 2,000 ppm or greater (except pumps handling polymerizing monomers).
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)(1)	Detect leaks from pressure relief devices in gas/vapor service at an instrument reading of 500 ppm above background.
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) 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 reading of 500 ppm.
60.5400(a) and 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) and 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 every 3 months.
60.5400(a) and 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, valves and connectors in heavy liquid service and pressure relief devices in light or heavy liquid service within 5 days by the method specified in 60.485a(b) 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 60.485a(b)(1)	Detect leaks from pumps, valves and connectors in heavy liquid service and pressure relief devices in light or heavy liquid service at an instrument reading of 10,000 ppm.
60.5400(a), 60.482-10a(e), (f), (l) and 60.485a(b)	Monitor each control device to ensure conformance with their designs and inspect each closed vent system initially and annually to detect leaks, except as provided in 60.482-10a(i) through (k).
60.5400(a) and (d), and 60.482-10a(g)	Detect leaks from closed vent systems and control devices at an instrument reading of 500 ppmv above background or by visual inspections.
60.5400(a) and 60.482-11a(g)	Identify the connectors subject to 60.482-11a.
60.5400(e), 60.486a(b) and (c), 60.5421(b)(1) and (b)(2)	Maintain required information for detected leaks.
60.5400(e) and 60.486a(d)	Required records for the design of the closed vent systems and control devices and period of time when they were not in operation as required.
60.5400(e) and 60.486a(e)	Required records for equipment identification and records for each leak test conducted (dates and results).
60.5400(e) and 60.486a(f)	Required records for valves, pumps and connectors identified as unsafe or difficult to monitor.
60.5400(e) and 60.486a(g)	Records required for valves where complying with 40 CFR 60.483-2a for skip leak detection and repair.
60.5400(e) and 60.486a(h)	Maintain required information on design criteria in 60.482-2a(d)(5) and 60.482-3a(e)(2).
60.5400(e) and 60.486a(i) and (j)	Records required for exemptions from the leak detection requirements, the analysis/data demonstrating that a piece of equipment is “not in VOC service” and the analysis demonstrating the design capacity of the process unit.
60.5401(b) and 60.5421(b)(2)	Additional record keeping and monitoring requirements for pressure relief devices at an onshore natural gas processing plant.

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:

60.5410(c)(2) and (f), 60.5420(a), 60.7(a)	Initial notification requirements.
60.5410(c)(3), 60.5415(c)(2), and 60.5420(b)	Submit initial annual report within 30 days after the end of the initial compliance period. Subsequent annual reports are due on the same date each year as the initial annual report.
60.5400(e), 60.487a(a), (b) and (c), and 60.5422(a), (b) and (c).	Submit semiannual reports beginning six months after the initial startup date.

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. <u>Emission Limitation</u>:

Fugitive emissions of VOC shall not exceed 0.69 ton per month averaged over a 12-month rolling period.

<u>Applicable Compliance Method</u>:

Compliance with the annual VOC emissions limitation shall be demonstrated by the following calculation based on the emissions factors (lb/hr/source) and LDAR monitoring control efficiencies in Table 2-4 of U.S. EPA's Protocol for Equipment Leak Emission Estimates (11/95), the guidance document entitled "Oil and Gas Production Operations" from the Texas Commission on Environmental Quality (10/00), and the recordkeeping in d)(1):

VOC = [(# of valves in gas service X gas service valve EF X gas service valve control efficiency) + (# of valves in heavy oil service X heavy oil service valve EF) + (# of valves in light oil service X light oil service valve EF X light oil service valve control efficiency) + (# of pumps in light oil service X light oil service pump EF X light oil service pump control efficiency) + (# of pumps in heavy oil service X heavy oil service pump EF) + (# of flanges in gas service X gas service flange EF) + (# of flanges in heavy oil service X

heavy oil service flange EF) + (# of flanges in light oil service X light oil service EF) + (# of other points in gas service X gas service other equipment EF) + (# of relief valves in gas service X gas service relief valves EF)] X (8,760 hours/year) X (1 year/12 months) X (1 ton/2,000 lbs)

where:

Valve EFs = 9.945E-03 lb/hr/source for gas service, 1.86E-05 lb/hr/source for heavy oil service, and 5.525E-03 lb/hr/source for light oil service;

Pump Seal EFs = 2.866E-02 lb/hr/source for light oil service and 1.13E-03 lb/hr/source for heavy oil service;

Flange EFs = 8.6E-04 lb/hr/source for gas service, 8.6E-07 lb/hr/source for heavy oil service, and 2.43E-04 lb/hr/source for light oil service;

Relief Valve EFs = 1.94E-02 lb/hr/source for gas service;

Other* EFs = 1.94E-02 lb/hr/source for gas service; and

LDAR monitoring control efficiencies = 97% for valves in gas service and light oil service and for relief valves in gas service; 75% for pumps in light oil service, and other/compressors in gas service; and 30% for flanges in gas service, light oil service and heavy oil service.

* includes drains/vents, pressure safety valves and sample points.

g) Miscellaneous Requirements

(1) Any amendment to 40 CFR Part 60, Subpart OOOO shall supersede the compliance limitations and/or options contained in this permit.