



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

11/29/2012

Mr. Travis DeFries
Valero Renewable Fuels Company, LLC
3979 State Route 238 NE
Bloomington, OH 43106

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0124000132
Permit Number: P0111916
Permit Type: Administrative Modification
County: Fayette

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

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/dapc/pemitsurvey.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, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-CDO; Kentucky



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Valero Renewable Fuels Company, LLC**

Facility ID:	0124000132
Permit Number:	P0111916
Permit Type:	Administrative Modification
Issued:	11/29/2012
Effective:	11/29/2012



Division of Air Pollution Control
Permit-to-Install
for
Valero Renewable Fuels Company, LLC

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Authorization

Facility ID: 0124000132
Facility Description: Ethanol Production Facility
Application Number(s): M0001959
Permit Number: P0111916
Permit Description: Administrative modification to remove terms and conditions associated with the Joint Stipulation and Settlement Agreement for emissions unit F001 and to add Standard Terms and Conditions Library language to emissions unit P801 identifying that the requirements of 40 CFR Part 60, subpart VVa are more stringent than the requirements of OAC rule 3745-21-09(DD).
Permit Type: Administrative Modification
Permit Fee: \$100.00
Issue Date: 11/29/2012
Effective Date: 11/29/2012

This document constitutes issuance to:

Valero Renewable Fuels Company, LLC
3979 State Route 238 NE
Bloomington, OH 43106

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

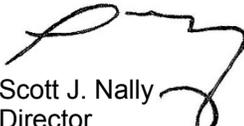
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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: P0111916

Permit Description: Administrative modification to remove terms and conditions associated with the Joint Stipulation and Settlement Agreement for emissions unit F001 and to add Standard Terms and Conditions Library language to emissions unit P801 identifying that the requirements of 40 CFR Part 60, subpart VVa are more stringent than the requirements of OAC rule 3745-21-09(DD).

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

Emissions Unit ID:	F001
Company Equipment ID:	F001
Superseded Permit Number:	P0108710
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P801
Company Equipment ID:	P801
Superseded Permit Number:	P0108710
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Valero Renewable Fuels Company, LLC
Permit Number: P0111916
Facility ID: 0124000132
Effective Date: 11/29/2012

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) The permittee must comply with all terms and conditions of this permit. 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, Central District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Central District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Central District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) 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.



- c) 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.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Central 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, Central 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, Central 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 (i.e., postmarked) 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).

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 party 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 Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying 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.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- 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 the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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



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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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



Final Permit-to-Install
Valero Renewable Fuels Company, LLC
Permit Number: P0111916
Facility ID: 0124000132
Effective Date: 11/29/2012

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
Valero Renewable Fuels Company, LLC
Permit Number: P0111916
Facility ID: 0124000132
Effective Date: 11/29/2012

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.



Final Permit-to-Install
Valero Renewable Fuels Company, LLC
Permit Number: P0111916
Facility ID: 0124000132
Effective Date: 11/29/2012

C. Emissions Unit Terms and Conditions



1. F001, F001

Operations, Property and/or Equipment Description:

paved roadways and parking areas

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.	ORC 3704.03(T)	No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

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.

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 visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.



2. P801, P801

Operations, Property and/or Equipment Description:

Fugitive VOC Emissions (leaks)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 39.31 tons per rolling, 12-month period. See b)(2)a.
b.	OAC rule 3745-21-09(DD)	The requirements established by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, subpart VVa and subpart A.
c.	40 CFR Part 60, subpart VVa	See b)(2)b.
d.	40 CFR Part 60, subpart A	See b)(2)c.

(2) Additional Terms and Conditions

a. The rolling, 12-month VOC emissions limitation for this emissions unit was established to reflect the potential-to-emit in accordance with the information provided in the PTI application and taking into consideration the implementation of a leak detection and repair (LDAR) program sufficient to demonstrate compliance with 40 CFR Part 60, subpart VVa. The monitoring, recordkeeping, reporting, and testing requirements associated with the LDAR program as established in the following terms and conditions are sufficient to demonstrate compliance with this limitation.

b. This emissions unit is subject to the requirements of 40 CFR Part 60, subpart VVa, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction or Modification Commenced After November 7, 2006". The permittee shall comply with the applicable Leak Detection and Repair (LDAR)



requirements identified in 40 CFR Part 60, subpart VVa. The complete 40 CFR Part 60 requirements, including the 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 Central District Office.

- c. The permittee shall demonstrate compliance with the applicable requirements established in 40 CFR Part 60, subpart VVa in accordance with the provisions established in 40 CFR Part 60, subpart A. The complete 40 CFR Part 60 requirements, including the 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 Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

- (1) When a leak is detected a weatherproof identification tag with the equipment identification number and the date detected shall be attached to the leaking equipment, valve, or seal. A record of the date the leak was first detected, the date of any attempted repair, and the date of final repair shall be entered into a log maintained for this purpose. Repair of a leak shall be attempted as soon as possible after it is detected.
- (2) Each compressor that is not equipped with a closed vent system capable of capturing and transporting any leakage from the drive shaft to a process, fuel gas system, or control device shall be equipped with a barrier fluid system to prevent VOC leakage to the atmosphere. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal and barrier fluid system; and the sensor shall be equipped with an audible alarm if it cannot be checked daily.
- (3) Except during pressure releases, each pressure relief device shall be operated with "no detectable emissions", as indicated by an instrument reading of less than 500 ppm above background, as measured by Method 21 in 40 CFR 60 Appendix A and in accordance with 40 CFR 60.485a(c). A pressure relief device shall be returned to a condition of "no detectable emissions" as soon as practicable following a pressure release, but no later than 5 days after the release. Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage through the pressure relief device to a control device, the pipeline, process heater, or flare is excluded from these requirements.
- (4) A first attempt at repair of a leak shall be made no later than 5 days after each leak is detected. The leak shall be repaired as soon as practicable, but (with the exception of a pressure relief device, requiring repair within 5 days of release), not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a, for delay of repair.
- (5) Each open ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve which shall seal the open end at all times, except during operations requiring process fluid flow. If equipped with a second valve, the valve on the process fluid end shall be closed before the second valve is closed. Where a double block-and-bleed system is being used, the bleed valve or line may remain open during operations



that require venting the line between the block valves, but shall seal the open end at all other times.

d) Monitoring and/or Recordkeeping Requirements

(1) The following information shall be recorded in a log that is kept in a readily accessible location.

	Applicable Rule	Requirements
a.	40 CFR 60.486a	Recordkeeping requirements
b.	40 CFR 60.486a(b)	Requirements to attach a weatherproof identification tag to leaking equipment
c.	40 CFR 60.486a(c)	Requirements to maintain a log of each leak detected for 2 years and the information to be maintained
d.	40 CFR 60.486a(d)	Required records for the design for the closed vent systems and control devices and period of time when they were not in operation as required
e.	40 CFR 60.486a(e)	Required records for equipment identification and records for each leak test conducted (dates and results)
f.	40 CFR 60.486a(f)	Required records for valves and pumps identified as unsafe or difficult to monitor
g.	40 CFR 60.486a(g)	Records required for valves where complying with 40 CFR 60.483-2a for skip leak detection and repair
h.	40 CFR 60.486a(h)	Records required for design criteria for the seal for pumps and compressors, i.e., the barrier fluid system and sensor
i.	40 CFR 60.480a(d); and 40 CFR 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.

(2) The ancillary equipment, compressors, pumps, pressure relief devices, sampling connection systems, open end valves or lines, valves, flanges, and any other connectors in VOC service, shall be monitored to demonstrate that there are "no detectable emissions" using Method 21, 40 CFR Part 60, Appendix A; and the records of these inspections shall be maintained for 2 years following the date of inspection and shall be made available upon request.

(3) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with "no detectable emissions", as indicated by an instrument reading of less than 500 ppm above background, measured by Method 21 from 40 CFR 60 Appendix A. After each pressure release, the pressure release device shall be returned to a condition of "no detectable emissions" as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a for delay of repair. Each pressure relief device in gas/vapor service shall be monitored in accordance with Method 21 unless it is routed to a process or fuel gas system, or is equipped with a closed-vent-system that captures and transports leakage through a pressure release device to a control device meeting the requirements of 40 CFR 60.482-10a.



The pressure relief device shall be monitored to confirm conditions of “no detectable emissions” no later than 5 days after the pressure release. As soon as practicable, but no later than 5 calendar days after each pressure release (except as allowed per 40 CFR 60.482-9a for delay or repair), the pressure relief device shall be returned to a condition of “no detectable emissions”, as indicated by a reading of less than 500 ppm above background.

Where there is a rupture disk upstream of the pressure relief device, a new rupture disk shall be installed no later than 5 calendar days after the pressure release, unless meeting the requirements of 40 CFR 60.482-9a for delay of repair.

- (4) Each pump in light liquid service shall be monitored monthly for leaks, in accordance with Method 21 at 40 CFR 60 Appendix A, except where it can be demonstrated that:
- a. The pump and barrier fluid system meet all of the following requirements:
 - i. The pump is equipped with a dual mechanical seal system that is:
 - (a) operated with a barrier fluid that is maintained, at all times, at a pressure that is greater than the pump stuffing box pressure; or
 - (b) is equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device meeting the requirements of 40 CFR 60.482-10a; or
 - (c) is equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions; and
 - ii. the barrier fluid system is in heavy liquid service or is not in VOC service; and
 - iii. the barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both; and
 - iv. each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seals; and if there is evidence of leakage is monitored within 5 days following the inspection using Method 21; and
 - v. each sensor is checked daily or is equipped with an audible alarm; or
 - b. the pump is designated for “no detectable emissions”, as indicated by a reading of less than 500 ppm above background, using Method 21, and the pump has no external actuated shaft penetrating the pump housing and is monitored (in accordance with Method 21) initially upon designation, annually, and upon request of the Director; or
 - c. the pump is routed to a process or fuel gas system or connected by a closed vent system to a control device meeting the requirements of 40 CFR 60.482-10a; or



- d. the pump is designated as unsafe-to-monitor and has been demonstrated to meet the requirements of this determination as required in 40 CFR 60.482-2a(g).

Each pump in light liquid service shall be visually inspected each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-1a(f) for a batch process. A pump located at an unmanned plant site is exempt from the weekly visual inspections; however each pump must be visually inspected as often as practicable and at least monthly.

For a pump, an instrument reading of 2,000 ppm or greater is a “leak detected”. When a leak is detected or a visual inspection determines liquids dripping from the pump, it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a for delay of repair. A first attempt repair of a detected leak shall be made within 5 days of detection.

- (5) Each compressor shall be equipped with a seal system and a barrier fluid system equipped with a sensor that will detect failure of the seal and/or barrier fluid system, except where meeting the requirements for a closed-vent-system in 40 CFR 60.482-10a, that captures and transports leakage from the compressor drive shaft to a process or fuel gas system or control device, or is designed and designated for “no detectable emissions”. The seal/barrier fluid system must meet the requirements of 40 CFR 60.482-3a(a) through (d) and must be visually inspected daily or be equipped a sensor with an audible alarm. A leak is detected when the sensor indicates a failure of the seal/barrier systems. A compressor that can be demonstrated to operate with “no detectable emissions”, as indicated by a reading of less than 500 ppm above background, in accordance with 40 CFR 60.485a(c), can be monitored initially upon designation and annually thereafter; otherwise, monthly* monitoring, in accordance with 40 CFR 60.485a(b), will be required.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a for delay of repair. A first attempt repair of a detected leak shall be made within 5 days of detection.

- (6) Each valve in gas/vapor service and light liquid service shall be monitored monthly, in accordance with 40 CFR 60.485a(b) for leaks, with the following exception:
 - a. the valve is designated for “no detectable emissions”, as indicated by a reading of less than 500 ppm above background in accordance with 40 CFR 60.485a(c), and has no external actuating mechanism in contact with the process fluids, it may be monitored initially upon designation and annually in accordance with 40 CFR 60.485a(c) thereafter; or
 - b. alternative standards can be implemented for valve leak detection, in accordance with 40 CFR 60.483-1a, based on 2.0% of valves leaking and where this option has been approved, by the regulating authority; or
 - c. the valve has been designated as unsafe-to-monitor as described in 40 CFR 60.486a(f)(1) and in accordance with 40 CFR 60.482-7a(g); or



- d. the valve has been designated as difficult-to-monitor as described in 40 CFR 60.486a(f)(2) and in accordance with 40 CFR 60.482-7a(h).

Any valve for which a leak is not detected for 2 consecutive months may be monitored the first month of every quarter, beginning with the next quarter, and until a leak is detected, where monitoring shall again be required monthly until another successive 2 months of no leakage has been documented. As an alternative to monitoring the first month of every quarter, the owner/operator may subdivide the process units into 2 or 3 subgroups of valves and monitor each subgroup in a different month of the quarter provided each group is monitored every 3 months and records are maintained of the subgroups; if a leak is detected, the valve must be monitored monthly until a leak is not detected for 2 successive months.

An instrument reading of 500 ppm or greater is a "leak detected". If a leak is detected it shall be repaired as soon as practicable, but not later than 15 days after it is detected, unless meeting the requirements of 40 CFR 60.482-9a for delay of repair. A first attempt repair of a detected leak shall be made within 5 days of detection and would include (but not be limited to) work practices identified in 40 CFR 60.482-7a(e).

- (7) Each connector in gas/vapor service and in light liquid service shall be monitored for leaks within 12 months after initial startup, following any process change for the connectors involved, and in accordance with 40 CFR 60.482-11a. Except as required for closed-vent-systems, all such connectors shall be monitored according to the following schedule:
 - a. if the percent of leaking connectors in the process unit was greater than or equal to 0.5%, then subsequent monitoring to detect leaks must be conducted within 12 months; or
 - b. if the percent of leaking connectors in the process unit was greater than or equal to 0.25% but less than 0.5%, then subsequent monitoring to detect leaks must be conducted within 4 years, with the option to monitor at least 40% of the connectors within 2 years of the start of the monitoring period, provided all the connectors are monitored by the end of the 4-years; or
 - c. if the percent of leaking connectors in the process unit was less than 0.25%, the frequency of monitoring shall/may follow the schedule calculated in accordance with 40 CFR 60.482-11a(b)(3)(iii); and
 - d. records must be maintained for the start date and end date of each monitoring period, and the monitoring results to support the scheduled used.

If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.

- (8) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system meeting the requirements of 40 CFR 60.482-5a(b), except in situ sampling systems and sampling systems without purges are exempt from these requirements.



- (9) Closed-vent-systems and control devices shall be operated in compliance with the following provision:
- a. Vapor recovery systems (e.g., condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, whichever is less stringent.
 - b. Enclosed combustion devices shall be designed and operated to reduce VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3% oxygen, whichever is less stringent; or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.
 - c. Flares shall comply with the requirements of 40 CFR 60.18 and 40 CFR 60.485a(g).
 - d. Each control device shall be monitored to ensure they are operated and maintained in conformance with their design.
 - e. Each closed-vent-system shall be inspected initially and annually thereafter in accordance with 40 CFR 60.482-10a(f) and monitored in accordance with 40 CFR 60.485a(b). A vapor recovery system or closed-vent-system is exempt from this inspection requirement if operated under a vacuum.
 - f. Leaks, as indicated by an instrument reading of 500 ppmv above background or by visual inspection, shall be repaired as soon as practicable, but not later than 15 days after it is detected, unless meeting the requirements of delay of repair in accordance with 40 CFR 60.482-10a(h). A first attempt repair of a detected leak shall be made within 5 days of detection.
 - g. Closed-vent-systems and control devices shall be operated at all times when emissions may be vented to them.
- (10) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection methods at pumps, valves, and/or connectors in heavy liquid service; and pressure relief devices in light liquid or heavy liquid service; and the evidence is not eliminated within 5 days of detection, the permittee shall follow these procedures:
- a. Monitor the equipment within 5 days by the appropriate method specified in 40 CFR 60.485a. An instrument reading of 10,000 ppm or greater is a "leak detected".
 - b. If a leak is detected it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a. A first attempt at repair shall be made within 5 days of detection and would include (but not be limited to) work practices identified in 40 CFR 60.482-2a(c)(2) and 40 CFR 60.482-7a(e).



- (11) The permittee may monitor at any time during the specified (per rule) monitoring period (i.e., monthly, quarterly, annually) which is a reasonable interval after completion of the previous monitoring event, as long as the time interval meets these requirements:
 - a. when monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days;
 - b. when monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days;
 - c. when monitoring is conducted 3 quarters per year, monitoring events must be separated by at least 90 calendar days; and
 - d. when qualified and monitoring is conducted semiannually (every 2 quarters), monitoring events must be separated by at least 60 calendar days.
- (12) The permittee shall record and maintain all of the records required to document visual inspections and monitoring of all ancillary equipment, compressors, pumps, pressure relief devices, sampling connection systems, open end valves or lines, valves, flanges, and any other connectors in VOC service, as identified above, using a list of equipment identification numbers assigned to each potential point of leakage. The permittee shall also comply with the recordkeeping requirements and maintain the records identified in 40 CFR 60.486a, including the date each leak was detected and dates of attempted and final repairs.
- (13) Any determination that a piece of ancillary equipment is unsafe or difficult to monitor shall be documented to meet the appropriate requirements identified in Part 60, Subpart VVa, e.g., as identified in: 40 CFR 60.482-2a(g) for pumps; 40 CFR 60.482-6a(d) or (e) for open-ended valves or lines; 40 CFR 60.482-7a(g) and (h) for valves; 40 CFR 60.482-10a(j), (k), or (l) for closed-vent-systems; and 40 CFR 60.482-11a(e) for connectors. Records must be maintained for each determination, in accordance with 40 CFR 60.486a(f). Any delay of repair shall meet the requirements of 40 CFR 60.482-9a.
- (14) The permittee shall maintain a record of the following information for each monitoring event required to demonstrate compliance with the standards for pumps in light liquid service in 40 CFR 60.482-2a; compressors in 40 CFR 60.482-3a; valves in gas/vapor and light liquid service in 40 CFR 60.482-7a; pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid and heavy liquid service in 40 CFR 60.482-8a; connectors in gas/vapor and light liquid service in 40 CFR 60.482-11a; and valves in 40 CFR 60.483-2a:
 - a. monitoring instrument identification;
 - b. operator identification;
 - c. equipment identification;
 - d. date of monitoring; and
 - e. instrument reading.



- (15) When each leak is detected as specified in 40 CFR 60.482–2a for pumps in light liquid service; 40 CFR 60.482–3a for compressors; 40 CFR 60.482–7a for valves in gas/vapor and light liquid service; 40 CFR 60.482–8a for pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid and heavy liquid service; 40 CFR 60.482–11a for connectors in gas/vapor and light liquid service; and 40 CFR 60.483–2a for valves, the following requirements apply:
- a. the leaking equipment shall be marked with a clearly visible, weatherproof tag showing the equipment identification number;
 - b. the tag identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482–7a(c) and no leak has been detected during those 2 months;
 - c. the tag identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482–11a(b)(3)(iv) and no leak has been detected during that monitoring; and
 - d. the tag identification on all other equipment other than a valve or connector may be removed after it has been repaired.
- (16) The following information shall be recorded in a log for each leak that is detected and these records shall be kept for 2 years in a readily accessible location:
- a. the identification numbers of the monitoring instrument and leaking equipment;
 - b. the name of the operator conducting the monitoring;
 - c. the date each leak was detected and the date(s) of each attempt to repair them;
 - d. the repair methods applied in each attempt to repair each leak;
 - e. the maximum instrument reading measured by Method 21 of Appendix A–7 of Part 60 at the time the leak is successfully repaired or at the time it is determined to be non-repairable (except where a pump is repaired by eliminating dripping liquids);
 - f. identification of equipment exceeding the applicable leak detection limit 15 days after discovery of the leak and the maximum instrument reading measured by Method 21;
 - g. the reason for any delay of repair, where a leak is not repaired within 15 calendar days after being discovered;
 - h. if a decision has been made that repair of a leak cannot be completed without a process shutdown, the signature of the person authorized to make that determination;
 - i. the expected date of successful repair of each leak that is not repaired within 15 days;



- j. dates of process unit shutdowns that occur while the equipment is unrepaired; and
 - k. the date of successful repair of each leak.
- (17) The following information pertaining to the design requirements for closed vent systems and control devices shall be recorded and kept in a readily accessible location:
- a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. a description of the parameter(s) monitored, as required in 40 CFR 60.482–10a(e), to ensure that control devices are operated and maintained in conformance with their design;
 - d. an explanation of why the parameter(s) was/were selected for the monitoring;
 - e. periods when the closed vent systems and control devices required in 40 CFR 60.482–2a, 40 CFR 60.482–3a, 40 CFR 60.482–4a, and 40 CFR 60.482–5a are not operated as designed, including periods when a flare pilot light does not have a flame; and
 - f. the dates of startups and shutdowns of the closed vent systems and control devices required per 40 CFR 60.482–2a, 40 CFR 60.482–3a, 40 CFR 60.482–4a, and 40 CFR 60.482–5a.
- (18) The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482–1a to 40 CFR 60.482–11a shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of Part 60 Subpart VVa;
 - b. a list of identification numbers for equipment that are designated for “no detectable emissions” under the provisions of 40 CFR 60.482–2a(e) for pumps in light liquid service; 40 CFR 60.482–3a(i) for compressors; and 40 CFR 60.482–7a(f) for valves in gas/vapor and light liquid service; and the designation of equipment as subject to these requirements signed by the person authorized to make this determination;
 - c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482–4a;
 - d. for each compliance demonstration conducted as required in 40 CFR 60.482–2a(e), for pumps in light liquid service; 40 CFR 60.482–3a(i), for compressors; 40 CFR 60.482–4a, for pressure relief devices; and 40 CFR 60.482–7a(f), for valves in gas/vapor and light liquid service:



- i. the dates of each compliance test;
 - ii. the background level measured during each compliance test; and
 - iii. the maximum instrument reading measured at the equipment during each compliance test;
- e. a list of identification numbers for equipment in vacuum service;
- f. a list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR 60.482–1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr;
- g. the date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service;
- h. records of the information for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of Appendix A–7 of Part 60 and 40 CFR 60.485a(b).
- i. date of calibration and initials of operator performing the calibration;
- i. calibration gas cylinder identification, certification date, and certified concentration;
 - ii. instrument scale(s) used;
 - iii. a description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A–7 of this part;
 - iv. results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., the instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value); and
 - v. if the permittee makes their own calibration gas, a description of the procedure used;
- j. the connector monitoring schedule for each process unit as specified in 40 CFR 60.482–11a(b)(3)(v); and
- k. the records of each release from a pressure relief device subject to the requirements of 40 CFR 60.482–4a.
- (19) The following information pertaining to all valves subject to the requirements of 40 CFR 60.482–7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482–2a(g), and all connectors subject to the requirements of 40 CFR 60.482–11a(e) shall be recorded in a log that is kept in a readily accessible location:



- a. a list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector; and
 - b. a list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (20) The following information shall be recorded for valves complying with the alternative monitoring standards for valves, where after 2 consecutive quarterly leak detection periods the percent of valves leaking is less than or equal to 2.0%:
- a. a schedule of the monitoring, which shall meet the requirements of 40 CFR 60.483–2a(b); and
 - b. the percent of valves found leaking during each monitoring period.
- (21) The following information shall be recorded in a log that is kept in a readily accessible location:
- a. the design criterion for each sensor that is used to indicate failure of the seal system or barrier fluid system in a pump, as required in 40 CFR 60.482–2a(d)(5), and/or in a compressor, as required by 40 CFR 60.482–3a(e)(2); and explanation of the design criterion; and
 - b. any changes to this criterion and reasons for the changes.
- (22) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d):
- a. an analysis demonstrating the design capacity of the affected facility;
 - b. a statement listing the feed or raw materials and products from the affected facilities; and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and
 - c. an analysis demonstrating that equipment is not in VOC service.
- (23) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The owner/operator shall submit semiannual reports that include the information identified in 40 CFR 60.487a and the report shall include the number of leaks detected during the reporting period, the identification of the equipment where each leak was



detected, and the dates of attempted and final repair. The report shall include the date of any leak that was detected and not repaired within 15 days of discovery, the reason for the delay of repair, the date of final repair, and any Method 21 test results conducted for the leak during the reporting period.

- (3) The initial semiannual report shall include the following information:
- a. the process unit identification;
 - b. the number of valves subject to the requirements of 40 CFR 60.482–7a, excluding those valves designated for “no detectable emissions” under the provisions of 40 CFR 60.482–7a(f);
 - c. the number of pumps subject to the requirements of 40 CFR 60.482–2a, excluding those pumps designated for “no detectable emissions” under the provisions of 40 CFR 60.482–2a(e) and those pumps complying with 40 CFR 60.482–2a(f);
 - d. the number of compressors subject to the requirements of 40 CFR 60.482–3a, excluding those compressors designated for “no detectable emissions” under the provisions of 40 CFR 60.482–3a(i) and those compressors equipped with a closed vent system to capture and transport leakage to a process, fuel gas system, or control device complying with 40 CFR 60.482–3a(h); and
 - e. the number of connectors subject to the requirements of 40 CFR 60.482–11a.
- (4) All subsequent semiannual reports shall include the following information, summarized from the recordkeeping requirements of 40 CFR 60.486a and identified for each process unit subject to Part 60 Subpart VVa:
- a. For each month during the semiannual reporting period the semiannual report must include the following information:
 - i. number of valves for which leaks were detected as described in 40 CFR 60.482–7a(b) or 40 CFR 60.483–2a;
 - ii. number of valves for which leaks were not repaired as required in 40 CFR 60.482–7a(d)(1);
 - iii. number of pumps for which leaks were detected as described in 40 CFR 60.482–2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii);
 - iv. number of pumps for which leaks were not repaired as required in 40 CFR 60.482–2a(c)(1) and (d)(6);
 - v. number of compressors for which leaks were detected as described in 40 CFR 60.482–3a(f);
 - vi. number of compressors for which leaks were not repaired as required in 40 CFR 60.482–3a(g)(1);



- vii. number of connectors for which leaks were detected as described in 40 CFR 60.482–11a(b);
 - viii. number of connectors for which leaks were not repaired as required in 40 CFR 60.482–11a(d); and
 - ix. the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible;
- b. dates of process unit shutdowns which occurred within the semiannual reporting period; and
 - c. revisions to items reported in the initial or subsequent semiannual compliance reports if changes have occurred since the last compliance report.
- (5) If the permittee elects to comply with the provisions of 40 CFR 60.483–1a or 40 CFR 60.483–2a, the alternative standards for valves demonstrated to have less than or equal to 2.0% of the facility valves leaking, the permittee shall notify the appropriate district or local office of the Ohio EPA Division of Air Pollution Control of the intention to demonstrate compliance with the alternative standard at least 90 days before implementing either of these provisions.
- (6) The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart VVa except that the permittee must notify the appropriate district or local office of the Ohio EPA Division of Air Pollution Control of the schedule for the initial performance tests at least 30 days before the initial compliance demonstration.
- f) **Testing Requirements**
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emissions Limitation:
VOC emissions shall not exceed 39.31 tons per rolling, 12-month period.
Applicable Compliance Method:
Compliance with the rolling, 12-month VOC emissions limitation has been determined using the actual component count and emission factors from 'Protocol for Equipment Leak Emission Estimates', EPA-453/R-95-017, Table 5-2.
Testing may be requested pursuant to OAC rule 3745-15-04(A). Such testing would be required to comply with methods described in OAC rule 3745-21-10 for volatile organic compounds.



- (2) The following testing requirements from Part 60 Subpart VVa apply to this emissions unit:

	Applicable Rule	Requirements
a.	40 CFR 60.485a	Test methods and procedures
b.	40 CFR 60.485a(b)	Method 21 shall be used to determine the presence of a leak in accordance with this paragraph
c.	40 CFR 60.485a(c)	Method 21 shall be used for determining compliance with “no detectable emissions” in accordance with this paragraph
d.	40 CFR 60.485a(d)	Demonstration that a piece of equipment is “not in VOC service”
e.	40 CFR 60.485a(e)	Demonstration that a piece of equipment is “in light liquid service”
f.	40 CFR 60.485a(f)	Sample used to demonstrate “in VOC or liquid service” shall be representative of the process fluid or gas used in the determination.
g.	40 CFR 60.485a(g)	Standards for a flare

- (3) Compliance with the emission limitations shall be determined in accordance with the following methods and the compliance demonstration must be completed for all equipment within 180 days of startup in accordance with 40 CFR 60.482-1a(a):

- a. Any demonstration that a piece of equipment is “not in VOC service” shall meet the requirements of 40 CFR 60.485a(d), where the VOC content of the process fluid (in contact with the equipment) must be tested using the appropriate ASTM methods identified in 40 CFR 60.485a(d)(1), or it can be demonstrated, to the Director satisfaction, that the process fluid cannot exceed 10% VOC by weight. Samples shall be representative of the process fluid.
- b. Any demonstration that a piece of equipment is in “light-liquid service” shall meet the requirements of 40 CFR 60.485a(e) and by showing all of the following conditions apply:
 - i. the vapor pressure of one or more of the organic compounds is greater than 0.3 kPa at 20°C (1.2 in. H₂O at 68°F), where standard reference texts of ASTM D2879-83 is used to document the vapor pressures; and
 - ii. the total concentration of the pure organic compounds having a vapor pressure greater than 0.3 kPa at 20°C (1.2 in. H₂O at 68°F) is equal to or greater than 20% by weight; and
 - iii. the fluid is a liquid at operating conditions; and
 - iv. samples shall be representative of the process fluid.
- c. Emission Limitation:
 VOC from fugitive equipment leaks



Applicable Compliance Method:

The detection of leaks of VOC into the ambient air from equipment shall be determined as follows:

- i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21.
- ii. The following calibration gases shall be used:
 - (a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and
 - (b) a mixture of air and methane or n-hexane at a concentration no more than, 2,000 ppm greater than the leak definition concentration of the equipment monitored.
- iii. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A; and a calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day in accordance with 40 CFR 60.485a(b).

d. Emission Limitation:

< 500 ppm VOC above background for demonstration of "no detectable emissions"

Applicable Compliance Method:

The detection of leaks of VOC into the ambient air from equipment and background level shall be determined as follows:

- i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21 and the instrument shall be calibrated each day before use.
- ii. The following calibration gases shall be used:
 - (a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and
 - (b) a mixture of air and methane or n-hexane at a concentration no more than, 2,000 ppm greater than the leak definition concentration of the equipment monitored.

All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. The leak detection instrument shall be calibrated



before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A.

e. Emissions Standard:

Where complying with the alternative standards for valves in 40 CFR 60.483-1a or 40 CFR 60.483-2a, determination of 2% of valves leaking shall be calculated in accordance with 40 CFR 60.485a(h).

Applicable Compliance Method:

The percent of valves leaking shall be determined using the following equation:

$$\%V_L = (V_L/V_T) \times 100$$

Where:

$\%V_L$ = percent leaking valves

V_L = number of valves found leaking

V_T = sum of total number of valves monitored

f. Emissions Standard:

To determine the monitoring frequency for connectors in gas/vapor or light-liquid service the calculation from 40 CFR 60.482-11a(c) shall be used.

Applicable Compliance Method:

The monitoring frequency for connectors in gas/vapor or light-liquid service shall be determined using the following equation:

$$\%C_L = (C_L/C_T) \times 100$$

Where:

$\%C_L$ = percent of leaking connectors as determined through periodic monitoring

C_L = number of connectors measured at 500 ppm or greater, by the method specified in 40 CFR 60.485(b)

C_T = the total number of monitored connectors in the process unit or affected facility

g) Miscellaneous Requirements

- (1) None.