

9/25/2012

Certified Mail

Dr. Michael Murphy  
BASF Corp  
1175 Martin Street  
Greenville, OH 45331-1886

Facility ID: 1431070035  
Permit Number: P0098038  
County: Hamilton

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 8/15/2012. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,



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

Cc: Southwest Ohio Air Quality Agency





## Response to Comments

Facility ID:	1431070035
Facility Name:	BASF Corp
Facility Description:	Chemical manufacturing facility.
Facility Address:	4900 Este Avenue Cincinnati, OH 45232-1491 Hamilton County
Permit:	P0098038, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Cincinnati Enquirer on 08/17/2012. The comment period ended on 09/16/2012.	
Hearing date (if held)	NA
Hearing Public Notice Date (if different from draft public notice)	NA

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

**1. Topic: None**

- a. Comment: No comments received.
- b. Response: None



**Ohio**

**Environmental  
Protection Agency**

**PRELIMINARY PROPOSED**

**Division of Air Pollution Control  
Title V Permit  
for  
BASF Corp**

Facility ID:	1431070035
Permit Number:	P0098038
Permit Type:	Renewal
Issued:	9/25/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Title V Permit
for
BASF Corp

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 2
1. Federally Enforceable Standard Terms and Conditions ..... 3
2. Monitoring and Related Record Keeping and Reporting Requirements..... 3
3. Scheduled Maintenance..... 6
4. Risk Management Plans ..... 6
5. Title IV Provisions ..... 7
6. Severability Clause ..... 7
7. General Requirements ..... 7
8. Fees..... 8
9. Marketable Permit Programs..... 8
10. Reasonably Anticipated Operating Scenarios ..... 8
11. Reopening for Cause ..... 9
12. Federal and State Enforceability ..... 9
13. Compliance Requirements ..... 9
14. Permit Shield ..... 11
15. Operational Flexibility..... 11
16. Emergencies..... 11
17. Off-Permit Changes ..... 11
18. Compliance Method Requirements ..... 12
19. Insignificant Activities or Emissions Levels..... 12
20. Permit to Install Requirement ..... 12
21. Air Pollution Nuisance ..... 13
22. Permanent Shutdown of an Emissions Unit ..... 13
23. Title VI Provisions ..... 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only ..... 14
25. Inspections and Information Requests ..... 14
26. Scheduled Maintenance/Malfunction Reporting ..... 14
27. Permit Transfers ..... 15
28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations ..... 15



B. Facility-Wide Terms and Conditions.....	16
C. Emissions Unit Terms and Conditions .....	37
1. B013, BUILDING 56 THERMINOL HEATER.....	38
2. P051, M-122 ESTERIFIER.....	43
3. P057, FATTY ALCOHOL UNITS 102/104 .....	46
4. P058, FATTY ALCOHOL UNITS X5/107.....	53
5. P059, FATTY ALCOHOL UNITS 103/106/108 .....	61
6. P064, ESTER STILL AND REFINING .....	68
7. T008 (751T09) and T009 (751T10) METHANOL STORAGE TANKs.....	70
8. P119, Industrial Lube Blending Process.....	77

## Authorization

Facility ID: 1431070035

Facility Description: Chemical manufacturing facility.

Application Number(s): A0029693, A0029694, A0029695, A0042426

Permit Number: P0098038

Permit Description: Renewal Title V permit for BASF Corp that is an organic chemical manufacturer. This renewal includes the following type of operations: a boiler, a number of batch, distilling, blending, storage, and fatty alcohol process operations that make chemicals.

Permit Type: Renewal

Issue Date: 9/25/2012

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number: P0098037

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

BASF Corp  
4900 Este Avenue  
Cincinnati, OH 45232-1491

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Southwest Ohio Air Quality Agency. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



## **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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

## 2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- 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 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the



insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Southwest Ohio Air Quality Agency.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### 3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### 4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## **5. 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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **6. Severability Clause**

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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **7. 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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. 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, reopening 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. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
- (2) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## 8. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## 9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

## 10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

## 11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## 12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

*(Authority for term: OAC rule 3745-77-07(B))*

## 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (3) 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 appropriate Ohio EPA District Office or local air agency 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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.
    - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

#### 14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

#### 15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

#### 16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

#### 17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that



qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*

#### **18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

#### **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

#### **20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*



**21. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible 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 responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*



**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

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.

**25. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

*(Authority for term: OAC rule 3745-77-07(C))*

**26. 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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air

agency in accordance with paragraph (B) of 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 emissions unit(s) that is (are) served by such control system(s).

**27. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **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 insignificant emissions units are located at this facility:
  - B001 – Building 56 Downtherm Vaporizer
  - B046 – Emergency Diesel Generator
  - J001 – Refrigerant Lubricants Loading (PTI 14-03707)
  - J005 – Synlube Blends Loading Rack (PTI 14-05943)
  - P052 – M-152 Esterifier (14-05869)
  - P054 – APG(R) Surfactants Production (PTI 14-01898)
  - P056 – APG(R) Surfactants Carbohydrates Unloading (PTI 14-01898)
  - P060 – Fatty Alcohol Unit 109 (PTI 14-04154)
  - P062 – Fatty Alcohol Bulk Loading (PTI 14-01897)
  - P065 – Esters Methanol Recovery Still (PTI 14-02677)
  - P066 – Fatty Alcohol Blend Tank 753-T23 (PTI 14-02924)
  - P067 – Fatty Alcohol Blend Tank 753-T25 (PTI 14-02924)
  - P069 – Methyl Ester Loading (PTI 14-02937)
  - P095 – Fatty Alcohol Transload Facility (PTI 14-03489)
  - P098 – Lubricants Blending and Drying (PTI 14-03707)
  - P105 – Transportation Lube Blending Process (P0110553)
  - T005 – 751-T17 Ethanol Storage Tank (PTI 14-01898)
  - T010 – 751-T12 Hydrocarbon Storage Tank (PTI 14-01897)
  - T011 – 751-T15 Sodium Methylate Storage Tank (PTI 14-01897)
  - T012 – 753-T04 C18 Fatty Alcohol Storage Tank (PTI 14-01897)
  - T013 – 753-T05 C16 Fatty Alcohol Storage Tank (PTI 14-01897)
  - T014 – 753-T06 C12/C14 Fatty Alcohol Storage Tank (PTI 14-01897)
  - T015 – 753-T07 C12/C14 Fatty Alcohol Storage Tank (PTI 14-01897)



T016 – 753-T08 Miscellaneous Fatty Alcohol Storage Tank (PTI 14-01897)

T017 – 753-T11 C12 Fatty Alcohol Storage Tank (PTI 14-01897)

T018 – 753-T12 C14 Fatty Alcohol Storage Tank (PTI 14-01897)

T022 – 753-T19 C8 Fatty Alcohol Storage Tank (PTI 14-01897)

T023 – 753-T20 C10 Fatty Alcohol Storage Tank (PTI 14-01897)

T024 – 753-T22 C12/C18 Methyl Esther Storage Tank (PTI 14-01897)

T025 – 753-T24 Glycerine Storage Tank (PTI 14-01897)

T026 – 753-T03 Fatty Alcohol Residue Storage Tank (PTI 14-01897)

T027 – 753-T18 C8/C18 Fatty Alcohol Storage Tank (PTI 14-01897)

T028 – Y-259 Esters Fuels Tank (PTI 14-02188)

T030 – C12/C14 Alcohol Tank (PTI 14-01899)

T031 – Y-340 Palm Kernal Oil Storage Tank (PTI 14-02812)

T032 – APG Surfactants Product Tank 723-T05 (PTI 14-02811)

T035 – Y-267 Refrigerant Lubes Tank (PTI 14-03707)

T066 – 752-T14 Fatty Alcohol Intermediate Storage Tank (PTI 14-04298)

T067 – 753-T27 Fatty Alcohol Storage Tank (PTI 14-04298)

T068 – 753-T29 Fatty Alcohol Storage Tank (PTI 14-04298)

T070 – Synlube Blending Tank TK-1 (PTI 14-05943)

T071 – Synlube Blending Tank TK-3 (PTI 14-05943)

T072 – 751-T02 Aqueous Methanol Storage Tank Y-212 (see B.3)

T075 – Dry Methanol Storage Tank Y-212 (see B.3)

T077 – Wet Methanol Storage Tank Y-212

T082 – Fatty Acid Residue Storage Tank 753-T31

T091 – Crude Methly Ester Storage Tank 752-T02

- d) Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.
3. 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants (NESHAP) Miscellaneous Organic Chemical Manufacturing (MON) Facility Wide Requirements
- a) The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants (NESHAP) Miscellaneous Organic Chemical Manufacturing (MON): P051, P057, P058, P059, T008, and T009; P060, P065, T010 thru T018, T022 thru T024, T026 thru T028, T072, T075, T077, T082 and T091. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.
- b) The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart FFFF. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 12 of 40 CFR Part 63, Subpart FFFF. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart FFFF and Subpart A.
- c) The permittee shall submit the following semiannual reports for each emissions unit subject to the provisions of 40 CFR Part 63, Subpart FFFF:
- (1) Company name and address;
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report;
  - (3) Date of report and beginning and ending dates of the reporting period;
  - (4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction;
  - (5) The compliance report must contain the information on deviations, as defined in 40 CFR 63.2550, according to B.3.c)(5) below:
    - a. If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

- b. For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the following. This includes periods of SSM.
  - i. The total operating time of the affected source during the reporting period.
  - ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
  - iii. Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.
- c. For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the following. This includes periods of SSM.
  - i. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - ii. The date, time, and duration that each CEMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
  - iii. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - iv. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.
  - v. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - vi. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.
  - vii. An identification of each HAP that is known to be in the emission stream.
  - viii. A brief description of the process units.
  - ix. A brief description of the CMS.
  - x. The date of the latest CMS certification or audit.





- i. A description of the process change.
    - ii. Revisions to any of the information reported in the original notification of compliance status report under B.3.c) and in 40 CFR 63.2520(d).
    - iii. Information required by the notification of compliance status report under B.3.c) and 40 CFR 63.2520(d) for changes involving the addition of processes or equipment at the affected source.
  - b. You must submit a report 60 days before the scheduled implementation date of any of the changes identified below.
    - i. Any change to the information contained in the pre-compliance report.
    - ii. A change in the status of a control device from small to large.
    - iii. A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 CFR 63.2460(b)(6)(i).
4. The first semiannual reports shall cover the period from January 1 through June 30 of each year. This first semiannual report shall be postmarked or delivered no later than August 31 of that year. The second semiannual reports shall cover the period from July 1 through December 31 of each year. This second semiannual report shall be postmarked or delivered no later than February 28<sup>th</sup> of the next year.
5. There are no Group 1 wastewater streams at this facility subject to waste water provisions of 40 CFR 63.2485. Therefore, the requirements of 40 CFR 63.2485 do not apply.
6. There are no Group 1 transfer racks at this facility. Therefore, the requirements of 40 CFR 63.2475 do not apply.
7. Leak Detection and Repair (LDAR) General Requirements
  - a) Emissions units at this facility subject to the requirements of 40 CFR 63 Subpart FFFF shall comply with the requirements for equipment leaks in 40 CFR 63, Subpart H, with the differences noted in paragraphs (b)(1) through (b)(5) of 40 CFR 63.2480. The definitions specified in 40 CFR 63.161 shall be utilized for the LDAR program specified in this permit.
  - b) Each piece of equipment in a process unit to which this subpart applies shall be identified such that it can be distinguished readily from equipment that is not subject to this subpart. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification.
  - c) Equipment that is in vacuum service is excluded from the requirements.
  - d) Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of 40 CFR 63.163 through 63.174 and 40 CFR 63.178 if it is identified as required in 40 CFR 63.181(j).

- e) When each leak is detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174, the following requirements apply:
- (1) Clearly identify the leaking equipment.
  - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3), and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring.
  - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
- f) Except as provided in paragraph 7.f)(1) of this permit and 40 CFR 63.181, all terms in this subpart that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement.
- (1) If the initial compliance date does not coincide with the beginning of the standard calendar period, an permittee may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of paragraphs 7.f)(2) or 7.f)(3) of these terms and in 40 CFR 63.181.
  - (2) Time periods specified in this subpart for completion of required tasks may be changed by mutual agreement between the permittee and the Administrator, as specified in subpart A of 40 CFR Part 63. For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.
  - (3) Except as provided in paragraph 7.f)(1) or 7.f)(2) in these terms and in 40 CFR 63.181, where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required according to the schedule specified in paragraphs 7.f)(3)(a) or 7.f)(3)(b) of these terms and in 40 CFR 63.181, as appropriate.
    - a. Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or
    - b. In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

- g) In all instances where a provision requires completion of a task during each of multiple successive periods, an permittee may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.
  - h) In all cases where the provisions require an permittee to repair leaks by a specified time after the leak is detected, it is a violation to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation. However, if the repairs are unsuccessful, a leak is detected and the permittee shall take further action as required by applicable provisions.
8. In addition to the general requirements specified in B.7.a) - B.7.h) above, the permittee shall comply with the following provisions of 40 CFR Part 63 Subpart H:
- a) 40 CFR 63.163 Standards: Pumps in light liquid service;
  - b) 40 CFR 63.164 Standards: Compressors;
  - c) 40 CFR 63.166 Standards: Sampling connection systems;
  - d) 40 CFR 63.167 Standards: Open-ended valves or lines;
  - e) 40 CFR 63.168 Standards: Valves in gas/vapor service and in light liquid service;
  - f) 40 CFR 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service;
  - g) 40 CFR 63.170 Standards: Surge control vessels and bottoms receivers;
  - h) 40 CFR 63.171 Standards: Delay of repair;
  - i) 40 CFR 63.172 Standards: Closed-vent systems and control devices;
  - j) 40 CFR 63.173 Standards: Agitators in gas/vapor service and in light liquid service;
  - k) 40 CFR 63.174 Standards: Connectors in gas/vapor service and in light liquid service;
  - l) 40 CFR 63.175 Quality improvement program for valves;
  - m) 40 CFR 63.176 Quality improvement program for pumps;
  - n) 40 CFR 63.177 Alternative means of emission limitation: General;
  - o) 40 CFR 63.178 Alternative means of emission limitation: Batch processes;
  - p) 40 CFR 63.179 Alternative means of emission limitation: Enclosed-vented process units;
  - q) 40 CFR 63.180 Test methods and procedures;
  - r) 40 CFR 63.181 Recordkeeping requirements (See B.9. Below); and
  - s) 40 CFR 63.181 Recordkeeping requirements. (See B.10. Below)

9. LDAR Recordkeeping requirements, 40 CFR Part 63.181.
- a) The permittee may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.
  - b) Except as provided in B.9.s), the following information pertaining to all equipment in each process unit subject to the requirements in 40 CFR 63.162 through 63.174 shall be recorded.
  - c) A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in 40 CFR 63.174 and instrumentation systems) subject to the requirements of 40 CFR Part 63, 63.174. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by 40 CFR 63.174(b)(1) or (b)(2);
    - (1) A schedule by process unit for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of 40 CFR 63.168(d); and
    - (2) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions may be identified on a plant site plan, in log entries, or by other appropriate methods.
  - d) The permittee shall collect and record the following information:
    - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 40 CFR 63.164(h), 40 CFR 63.165(c), or 40 CFR 63.173(f);
    - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i); and.
    - (3) Identification of surge control vessels or bottoms receivers subject to the provisions of 40 CFR 63.170 that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.170.
  - e) A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a) and a list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d).
  - f) Identification of instrumentation systems subject to the provisions of 40 CFR Part 63.169. Individual components in an instrumentation system need not be identified.

- g) Identification of screwed connectors subject to the requirements of 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
- h) The following information shall be recorded for each dual mechanical seal system:
- (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
  - (2) Any changes to these criteria and the reasons for the changes.
- i) The following information pertaining to all pumps subject to the provisions of 40 CFR 63.163(j), valves subject to the provisions of 40 CFR 63.168(h) and (i), agitators subject to the provisions of 40 CFR 63.173(h) through (j), and connectors subject to the provisions of 40 CFR 63.174(f) and (g) shall be recorded:
- (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment;
  - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment; and
  - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- j) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used and a list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.
- k) The permittee shall collect and record the following information:
- (1) For batch process units that the permittee elects to monitor as provided under 40 CFR 63.178(c), a list of equipment added to batch product process units since the last monitoring period required in 40 CFR 63.178(c)(3)(ii) and (3)(iii); and
  - (2) Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch process that is subject to the provisions of 40 CFR 63.181. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the permittee does not adjust monitoring frequency by the time in use, as provided in 40 CFR 63.178(c)(3)(iii).
- l) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

- m) For equipment subject to visual inspections (e.g., 40 CFR 63.163(b)(3), 40 CFR 63.163(e)(4)(i)), the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in B.9.n) for leaking equipment identified in this inspection, except as provided in B.9.s). These records shall be retained for 2 years.
- n) When each leak is detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174, the following information shall be recorded and kept for 2 years:
- (1) The instrument and the equipment identification number and the operator name, initials, or identification number;
  - (2) The date the leak was detected and the date of first attempt to repair the leak;
  - (3) The date of successful repair of the leak;
  - (4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable; and
  - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak:
    - a. The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure; and
    - b. If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
- o) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- p) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii) and the date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of 40 CFR 63.181, then all connectors within the designated location shall be monitored.
- q) The date and results of the monitoring required in 40 CFR 63.178(c)(3)(i) for equipment added to a batch process unit since the last monitoring period required in 40 CFR 63.178 (c)(3)(ii) and (c)(3)(iii). If no leaking equipment is found in this monitoring, the permittee shall record that the inspection was performed. Records of the actual monitoring results are not required.
- r) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.

- s) The permittee of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance with this subpart is exempt from the requirements of B.9.b) - B.9.r) and B.9.t). Instead, the permittee shall maintain records of the following information:
- (1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train;
  - (2) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions is not required. Equipment in a batch product process subject to the provisions may be identified on a plant site plan, in log entries, or by other appropriate methods;
  - (3) The dates of each pressure test required in 40 CFR 63.178(b), the test pressure, and the pressure drop observed during the test;
  - (4) Records of any visible, audible, or olfactory evidence of fluid loss; and
  - (5) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:
    - a. The date of each pressure test and the date of each leak repair attempt;
    - b. Repair methods applied in each attempt to repair the leak;
    - c. The reason for the delay of repair;
    - d. The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment; and
    - e. The date of successful repair.
- t) The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165(a) and (b) .
- The results shall include:
- (1) The background level measured during each compliance test; and
  - (2) The maximum instrument reading measured at each piece of equipment during each compliance test.
- u) The permittee shall maintain records of the information specified in paragraphs B.9.u)(1) through B.9.u)(3) for closed-vent systems and control devices subject to the provisions of 40 CFR 63.172. The records specified in paragraph B.9.u)(1) shall be retained for the life of the equipment. The records specified in paragraphs B.9.u)(2) and B.9.u)(3) shall be retained for 2 years, see below.

- (1) The design specifications and performance demonstrations specified in paragraphs B.9.u)(1)a. through B.9.u)(1)d. ;
    - a. Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams;
    - b. The dates and descriptions of any changes in the design specifications;
    - c. The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of subpart A of 40 CFR Part 63; and
    - d. A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (2) Records of operation of closed-vent systems and control devices, as specified in paragraphs B.9.u)(2)a. through B.9.u)(2)c., see below ;
    - a. Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 40 CFR 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame;
    - b. Dates and durations during which the monitoring system or monitoring device is inoperative; and
    - c. Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 40 CFR 63.170.
  - (3) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172 , as specified in B.9.u)(3)a. and B.9.u)(3)b., see below :
    - a. For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and
    - b. For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in paragraph (d) 40 CFR 63.181 shall be recorded.
- v) Each permittee of a process unit subject to the requirements of 40 CFR 63.175 and 63.176 shall maintain the records specified in paragraphs B.9.v)(1) through B.9.v)(9) for the period of the quality improvement program for the process unit (see below);
- (1) For permittees who elect to use a reasonable further progress quality improvement program, as specified in 40 CFR 63.175(d):

- a. All data required in 40 CFR 63.175(d)(2);
  - b. The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter; and
  - c. The beginning and ending dates while meeting the requirements of 40 CFR 63.175(d)
- (2) For permittees who elect to use a quality improvement program of technology review and improvement, as specified in 40 CFR 63.175(e):
- a. All data required in 40 CFR 63.175(e)(2);
  - b. The percent leaking valves observed each quarter;
  - c. Documentation of all inspections conducted under the requirements of 40 CFR 63.175(e)(4), and any recommendations for design or specification changes to reduce leak frequency; and
  - d. The beginning and ending dates while meeting the requirements of 40 CFR 63.175(e).
- (3) For permittees subject to the requirements of the pump quality improvement program as specified in 40 CFR 63.176:
- a. All data required in 40 CFR 63.176(d)(2);
  - b. The rolling average percent leaking pumps;
  - c. Documentation of all inspections conducted under the requirements of 40 CFR 63.176(d)(4), and any recommendations for design or specification changes to reduce leak frequency; and
  - d. The beginning and ending dates while meeting the requirements of 40 CFR 63.176(d).
- (4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.
- (5) Records of all analyses required in 40 CFR 63.175(e) and 63.176(d). The records will include the following:
- a. A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices;
  - b. The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials;

- c. The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under 40 CFR 63.175(e)(6)(iii) and 63.176(d)(6)(iii);
    - d. The beginning date and duration of performance trials of each candidate superior emission performing technology.
  - (6) All records documenting the quality assurance program for valves or pumps as specified in 40 CFR 63.175(e)(7) and 63.176(d)(7).
  - (7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in 40 CFR 63.175(e)(7) and 40 CFR 63.176(d)(7).
  - (8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in 40 CFR 63.176(d)(8).
  - (9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.
- w) The permittee of equipment in heavy liquid service shall comply with the requirements of either paragraph B.9.w)(1) or B.9.w)(2), as provided in paragraph B.9.w)(3), see below:
- (1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service;
  - (2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service; and
  - (3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.
- x) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63.160.
- y) Permittees choosing to comply with the requirements of 40 CFR 63.179 shall maintain the following records:
- (1) Identification of the process unit(s) and the organic HAP's they handle;
  - (2) A schematic of the process unit, enclosure, and closed-vent system; and
  - (3) A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

## 10. LDAR Reporting Requirements 40 CFR 63.182

- a) The permittee shall submit Periodic Reports.
- (1) A report containing the information in paragraphs B.10.a)(2), B.10.a)(3), and B.10.a)(4) of this section shall be submitted semiannually.
- (2) For each process unit complying with the provisions of 40 CFR 63.163 through 40 CFR 63.174, the summary information listed in paragraphs B.10.a)(2)a. through B.10.a)(2)n. for each monitoring period during the 6-month period:
- a. The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leakers, and the total number of valves monitored;
  - b. The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined non-repairable;
  - c. The number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leakers, and the total number of pumps monitored;
  - d. The number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c);
  - e. The number of compressors for which leaks were detected as described in 40 CFR 63.164(f);
  - f. The number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g);
  - g. The number of agitators for which leaks were detected as described in 40 CFR 63.173(a) and (b);
  - h. The number of agitators for which leaks were not repaired as required in 40 CFR 63.173(c);
  - i. The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;
  - j. The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined non-repairable;
  - k. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible;
  - l. The results of all monitoring to show compliance with 40 CFR 40 CFR 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period;

- m. If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 40 CFR 63.175 or 63.176;
      - n. If applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1); and
      - o. If applicable, the compliance option that has been selected under 40 CFR 63.172(n).
    - (3) Should the permittee choose to meet the requirements of 40 CFR 63.178(b), the report shall include the information listed in B.10.a)(3)a. through B.10.a)(3)e. for each process unit:
      - a. Batch product process equipment train identification;
      - b. The number of pressure tests conducted;
      - c. The number of pressure tests where the equipment train failed the pressure test;
      - d. The facts that explain any delay of repairs; and
      - e. The results of all monitoring to determine compliance with 40 CFR 63.172(f).
    - (4) The information listed in paragraph (c) of 40 CFR Part 63.182 for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.
11. Heat exchange system requirements for recirculating heat exchangers X5-H03 and X5-H04. As specified in 40 CFR 63.2490, the permittee shall comply with Table 10 of 40 CFR Part 63 Subpart FFFF.
- a) The permittee shall monitor the cooling water for the presence of one or more organic hazardous air pollutants or other representative substances whose presence in cooling water indicates a leak. This monitoring shall comply with the following requirements:
    - (1) The cooling water shall be monitored for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system;
    - (2) The cooling water shall be monitored monthly for the first six months and quarterly thereafter to detect leaks;
    - (3) For recirculating heat exchange systems (cooling tower systems), the monitoring of speciated hazardous air pollutants or total hazardous air pollutants refers to the hazardous air pollutants listed in table 4 of Subpart F.
    - (4) The concentration of the monitored substance(s) in the cooling water shall be determined using any EPA-approved method listed in part 136 of this chapter as long as

the method is sensitive to concentrations as low as 10 parts per million and the same method is used for both entrance and exit samples. Alternative methods may be used upon approval by the Administrator.

- (5) The samples shall be collected either at the entrance and exit of each heat exchange system or at locations where the cooling water enters and exits each heat exchanger or any combination of heat exchangers.
    - a. For samples taken at the entrance and exit of recirculating heat exchange systems, the entrance is the point at which the cooling water leaves the cooling tower prior to being returned to the process equipment and the exit is the point at which the cooling water is introduced to the cooling tower after being used to cool the process fluid.
    - b. For samples taken at the entrance and exit of each heat exchanger or any combination of heat exchangers in chemical manufacturing process units, the entrance is the point at which the cooling water enters the individual heat exchanger or group of heat exchangers and the exit is the point at which the cooling water exits the heat exchanger or group of heat exchangers.
  - (6) A minimum of three sets of samples shall be taken at each entrance and exit as defined in B.11.a)(5) above. The average entrance and exit concentrations shall then be calculated. The concentration shall be corrected for the addition of any makeup water or for any evaporative losses, as applicable.
  - (7) A leak is detected if the exit mean concentration is found to be greater than the entrance mean using a one-sided statistical procedure at the 0.05 level of significance and the amount by which it is greater is a least 1 part per million or 10 percent of the entrance mean, whichever is greater.
- b) If a leak is detected in the heat exchange system, the permittee shall comply with the following requirements except as provided in 40 CFR 63.104(e):
- (1) The leak shall be repaired as soon as practical but not later than 45 calendar days after the permittee receives results of monitoring tests indicating a leak. The leak shall be repaired unless the permittee demonstrates that the results are due to a condition other than a leak.
  - (2) Once the leak has been repaired, the permittee shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later.
- c) The permittee shall maintain the following records for heat exchange systems:
- (1) The permittee shall maintain monitoring data indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination.
  - (2) The permittee shall maintain records of the dates of efforts to repair leaks.

(3) The permittee shall maintain records of the method or procedure used to confirm repair of a leak and the date repair was confirmed.

d) The permittee shall submit the following information for heat exchange systems if the permittee invokes the delay of repair provisions found in 40 CFR 63.104(e). If the leak remains unrepaired, the information shall also be submitted in each subsequent periodic report, until repair of the leak is reported. This information shall be submitted in the semi-annual periodic report:

(1) The permittee shall report the presence of a leak and the date that the leak was detected.

(2) The permittee shall report whether or not the leak has been repaired.

(3) The permittee shall report the reason(s) for delay of repair. If delay of repair is invoked due to the reasons described in paragraph (e)(2) of 40 CFR 63.104, documentation of emissions estimates must also be submitted.

(4) If the leak remains unrepaired, the permittee shall report the expected date of repair.

(5) If the leak is repaired, the permittee shall report the date the leak was successfully repaired.

12. OAC rule 3745-21-16-Control of Volatile Organic Compound Emissions from Industrial Wastewater

The facility does not have a combined total potential to emit for VOC emissions equal to or greater than one hundred tons of VOC per calendar year on or after May 27, 2005 from all of the following:

a) Industrial wastewater sources (waste management units);

b) All non-CTG sources; and

c) Un-regulated emissions from CTG sources except sources regulated under Subparts BBB, III, NNN, and RRR of 40 CFR Part 60 and sources regulated under Subpart T of 40 CFR Part 63.

Therefore, the requirements of OAC rule 3745-21-16 do not apply to this facility.

13. 40 CFR Part 63, Subpart DDDDD (Boiler MACT) Requirements

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD, in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD).

The following emissions unit in this permit is subject to the aforementioned requirements: B013.

(Authority for term: 40 CFR Part 63)

14. 40 CFR Part 63, Subpart A, General Provisions

The permittee is subject to the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions), as set forth in Table 10 of Subpart DDDDD.

The following emissions unit in this permit is subject to the aforementioned requirements: B013.

(Authority for term: 40 CFR Part 63)

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



1. B013, BUILDING 56 THERMINOL HEATER

Operations, Property and/or Equipment Description:

15.0 MMBtu/Hr Natural Gas-fired Therminol heater supporting esterification processes.

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 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
b.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 lb. of PE per MMBtu of actual heat input.
c.	40 CFR Part 63, Subpart DDDDD Industrial, Commercial, and Institutional Boilers and Process Heaters.  As defined in 40 CFR 63.7490; B013 is an existing emissions unit and falls under the following subcategories as defined in 40 CFR 63.7499:  B013 - Unit designed to burn natural gas, refinery gas or other gas 1 fuels.	See b)(2)b. thru j.
d.	40 CFR Part 63, Subpart A, General Provisions	See b)(2)k.

(2) Additional Terms and Conditions

a. OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.

- b. The particulate emission limitation established pursuant to OAC rule 3745-17-10(B)(1) is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation) after the compliance date in 40 CFR Part 63, Subpart DDDDD.
- c. Applicable Emission Limits in Tables 1 and 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63 (subject to change based on the issuance of the Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD by U.S. EPA).
- d. The requirements of 40 CFR Part 63, Subpart DDDDD are currently effective due to the January 9, 2012 decision by the United States District Court for the District of Columbia to vacate the administrative stay that U.S. EPA put in place during the reconsideration of the March, 2011 final rules. On February 7, 2012, U.S. EPA issued a "No Action Assurance" letter to facilities and indicated that U.S. EPA will exercise its enforcement discretion to not pursue enforcement action of violations of the Initial Notification deadlines established in the rule. This letter further notes that U.S. EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements in the Boiler MACT rule) and to the subcategories for some units. U.S. EPA plans to issue a Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD in the spring of 2012.
- e. As specified in 40 CFR 7495(b), as an existing emission units, the permittee shall comply with this subpart no later than March 21, 2014.
- f. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- g. Should the permittee choose to assert an affirmative defense if an emission limitation is exceeded during a malfunction the provisions of 40 CFR 63.7501 shall be followed.
- h. At all times the permittee shall comply with the general requirements for complying with 40 CFR 63 Subpart DDDDD as specified in 40 CFR 63.7505(a)-(d).
- i. The permittee shall comply with the initial compliance requirements and compliance dates as specified in 40 CFR 63.7510(a)-(g). Initial compliance with the emission limitations, fuel specifications and work practice standards shall be demonstrated following the procedures in 40 CFR 63.7530(a)-(h).

- j. After the initial compliance demonstration specified in 40 CFR 63.7510, the permittee shall conduct subsequent performance tests, fuel analyses, or tune-ups as required in 40 CFR 63.7515(a)-(g).
  - k. The permittee is subject to the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions), as set forth in Table 10 of Subpart DDDDD.
- c) **Operational Restrictions**
- (1) The permittee shall burn only natural gas in this emissions unit.  
[Authority for term: OAC rules 3745-77-07(A)(1), 3745-17-10(B)(1)]
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.  
[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1)]
  - (2) Fuel analyses, fuel specification, and the associated procedures required under 40 CFR Part 63 Subpart DDDDD shall be conducted as specified in 40 CFR 63.7521(a)-(i).  
(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)
  - (3) Should the permittee choose to demonstrate compliance through emissions averaging, the requirements established in 40 CFR 63.7522 shall be followed.  
(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)
  - (4) The permittee shall comply with the monitoring, installation, operation, and maintenance requirements specified in 40 CFR 63.7525(a)-(k).  
(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)
  - (5) Should the permittee elect to comply with the alternative equivalent steam output-based emission limits, instead of the heat input-based limits, listed in Tables 1 and 2 40 CFR 63 Subpart DDDDD and the permittee want to take credit for implementing energy conservation measures identified in an energy assessment, the permittee may demonstrate compliance using emission reduction credits according to the procedures 40 CFR 63.7533. Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the emission credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the emission credit according to the procedures in paragraphs 40 CFR 63.7533 (b) through (f). The PM monitoring requirements specified in 40 CFR section 63.7525 will replace the monitoring requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.  
(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

- (6) In order to demonstrate continuous compliance, the permittee shall monitor and collect data in accordance with 40 CFR 63.7535(a)-(d).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1)]

- (2) In order to demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards specified in Tables 1 through 3 of 40 CFR 63 Subpart DDDDD, the permittee shall follow the methods specified in Table 8 of 40 CFR 63 Subpart DDDDD and 40 CFR 63.7540 (a)(1) through (11).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

- (3) Should the permittee choose to demonstrate continuous compliance under the emissions averaging provision of 40 CFR 63.7522 the permittee shall demonstrate compliance on a continuous basis by meeting the requirements specified in 40 CFR 63.7541(a)(1) through (5).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

- (4) The permittee shall submit the notifications specified in 40 CFR 63.7545(a)-(h) by the due dates specified in this section.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

- (5) The permittee shall submit each applicable report in Table 9 of 40 CFR 63 Subpart DDDDD as specified in 40 CFR 63.7550(a)-(h).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)

- (6) The permittee shall maintain the records specified in 40 CFR 63.7555(a)-(h).

The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You can keep the records off site for the remaining 3 years.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63)



f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 lb. of PE/MMBtu of actual heat input

Applicable Compliance Method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. Ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. Ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr.).

If required, the permittee shall demonstrate compliance with the PE emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1)]

g) Miscellaneous Requirements

(1) None.



2. P051, M-122 ESTERIFIER

Operations, Property and/or Equipment Description:

Esterification and transesterification of fatty acids, fatty alcohols, and esters.

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 3745-21-14	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
b.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)  accordance with 40 CFR 63.2460 (b), this emissions unit contains Group 2 batch process vents and is subject to the recordkeeping requirements specified in 40 CFR 63.2525(e)(4).]	See b)(2)a.  See Sections B.7-B.10 of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2480).  See Section B.5 of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485).  See Section B.6 of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475).
c.	40 CFR 63.1 – 15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. In accordance with 40 CFR 63.2460(b) and 40 CFR 63.2550, the process vents associated with this emissions unit are classified as Group 2 batch process vents because the collective uncontrolled organic HAP emissions from all of the batch process vents are less than 10,000 pounds per year at an existing source.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information:

- a. A record of the day each batch was completed;
- b. A record of whether each batch operated was considered a standard batch;
- c. The estimated uncontrolled and controlled emissions of HAP(s) for each batch that is considered to be a nonstandard batch;
- d. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

The HAP emissions shall be calculated in accordance with 40 CFR 63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of 40 CFR 63.2460.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2525(e)(4)(iv)]

- (2) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2525(b)]

- (3) In accordance with 40 CFR 63.2525(c), the permittee shall maintain a schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2525(c)]

e) Reporting Requirements

- (1) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.3.c.) of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 63.2520(b) and (e)]

- f) Testing Requirements
  - (1) None.
- g) Miscellaneous Requirements
  - (1) None.



3. P057, FATTY ALCOHOL UNITS 102/104

Operations, Property and/or Equipment Description:

Transesterification and fractionation of crude methyl esters.

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) (PTI 14-04154, issued 02/12/04)	Organic Compound (OC) emissions from the scrubber shall not exceed 7.46 pounds per hour.  Fugitive Organic Compound (OC) emissions shall not exceed 0.23 pound per hour.  Annual Organic Compound (OC) emissions shall not exceed 2.31 tons per year.  See b)(2)a.- b)(2)c.
b.	OAC rule 3745-21-13(F)	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
c.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)  accordance with 40 CFR 63.2550, this emissions unit contains Group 1 continuous process vents that are part of a combined emission stream subject to the emission limitations/control measures specified in 40 CFR 63.2450(c).]	See b)(2)d. and c)(1).  See Sections B.7-B.10 of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2480).  See Section B.5 of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485). See Section B.6 of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475).
d.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. The wet scrubber controlling this emissions unit shall have a control efficiency of at least 80% by weight for condensable OC.
- b. The emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limits.
- c. The emissions from this emissions unit shall be vented to the wet scrubber at all times the emissions unit is in operation.
- d. In accordance with 40 CFR 63.2450(c)(2)(v), the permittee shall reduce total hazardous air pollutant (HAP) emissions by  $\geq 95$  percent by weight or to  $< 20$  ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents and vents from Group 1 storage tanks through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1) the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rules 3745-77-07(A)(1), 40 CFR Part 63.2450(e)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the following:
  - a. The scrubber water flow rate through the venture portion of the scrubber shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation; and

- b. The scrubber water flow rate through the packed bed portion of the scrubber shall be continuously maintained at a value of not less than 25 gallons per hour while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate through the venture portion of the scrubber (in gallons per minute), and the scrubber liquid flow rate through the packed bed portion of the scrubber (in gallons per hour) including periods of startup and shutdown. Flow rates shall be used recorded every fifteen minutes or less. The daily average flow rates shall be used to determine compliance with the minimum flow rates specified in d)(1)a. and b. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. The date and time the deviation began;
- b. The magnitude of the deviation at that time;
- c. The date the investigation was conducted;
- d. The name(s) of the personnel who conducted the investigation; and
- e. The findings and recommendations.

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

- f. A description of the corrective action;
- g. The date the corrective action was completed;
- h. The date and time the deviation ended;
- i. The total period of time (in minutes) during which there was a deviation;
- j. The flow rate and pH readings immediately after the corrective action was implemented; and
- k. The name(s) of the person who coordinated the work.

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

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (3) The permittee shall record the results of each calibration check and all maintenance performed on the continuous parametric monitoring system as specified in 40 CFR 63.998(c)(1)(ii)(A).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(1)]

- (4) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:
- a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow(make-up water).
  - b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D).
  - c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(5)]

- (5) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(b)]

- (6) In accordance with 40 CFR 63.2525(f) through (g), the permittee shall maintain the following records:
- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
  - b. Records of the results of each continuous parametric monitoring system (CPMS) calibration check and the maintenance performed, as specified in §63.2450(k)(1).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(f) through (g)]

- (7) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping contained in Permit to Install PTI 14-04154, issued on February 12, 2004: d)(1)-d)(6). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- Each period of time (start time and date, and end time and date) when the liquid flow rates were outside of the appropriate ranges or exceeded the applicable limits contained in this permit;
  - Any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
  - Each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - Each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - Each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (2) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.3.c) of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 63.2520(b) and (e)]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install PTI 14-04154, issued on February 12, 2004: e)(1) - e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

## f) Testing Requirements

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

## a. Emission Limitation:

7.46 lbs./hr. of OC from the scrubber, 0.23 lb./hr. of OC fugitive, 2.31 TPY of OC.

## Applicable Compliance Method:

The hourly limit from the scrubber is determined by summing the controlled emissions from the process tanks and process vessels. Fugitive emissions are determined by summing the hourly emissions from uncontrolled process tanks and vessels. Emission factors and process flow rates are confidential. The hourly emission calculations take into account higher than normal emissions that occur during periodic operations such as tank loading and line clearing. The process is considered continuous, but higher hourly emissions will occur when these types of operations occur. Annual emissions were determined using the emissions unit's maximum production capacity and hours of operation, 8760 hr/yr. If required, the mass rate of emissions shall be determined using Method 25 of 40 CFR 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- b. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within within 6 months after issuance of the permit. Testing frequency will be based on the previous test results and Ohio EPA Engineering Guide #16.

The emission testing shall be conducted to demonstrate compliance with the HAP emission limitations/control requirements specified in b)(2)d. and the OC control efficiency specified in b)(2)a. exiting the scrubber.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60 Appendix A, Methods 1-4, and 18.

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

During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.

The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install PTI 14-04154, issued 02/12/04: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) **Miscellaneous Requirements**

- (1) None.



4. P058, FATTY ALCOHOL UNITS X5/107

Operations, Property and/or Equipment Description:

Hydrogenation of methyl esters and fractionation of fatty alcohols.

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) (PTI 14-01897, issued April 8, 2004)	Organic Compound emissions shall not exceed 3.53 pounds per hour and 2.87 TPY.  The lbs/hr and TPY emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limits.  See b)(2)a.
b.	OAC rule 3745-21-13	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
c.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)  accordance with 40 CFR 63.2550, this emissions unit contains Group 1 continuous process vents that are part of a combined emission stream subject to the emission limitations/control measures specified in 40 CFR 63.2450(c).]	See b)(2)b., b)(2)c., and c)(1)-c)(2).  See Sections B.7-B.10 of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2480).  See Sections B.5 of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See Section B.6 of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475).
d.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. Other than process vent X5 (as identified in the MON Notification of Compliance Status submitted on 10/7/2008), all other process vents from this emissions unit shall be vented to a scrubber with a control efficiency of greater than 80% by weight for condensable OC. Process vent X5 shall be vented to a flare with a destruction efficiency of at least 99.9% by weight.

The control efficiency requirement for the scrubber established under OAC rule 3745-31-05(A)(3) is less stringent than the organic HAP reduction requirements established pursuant to 40 CFR Part 63, Subpart FFFF.

- b. In accordance with 40 CFR 63.2450(c)(2)(ii), the permittee shall reduce total organic HAP emissions by venting Group 1 continuous process vents from the X5 Unit through a closed-vent system to a flare.
- c. In accordance with 40 CFR 63.2450(c)(2)(v), the permittee shall reduce total hazardous air pollutant (HAP) emissions by  $\geq$  95 percent by weight or to  $<$  20 ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents from the 107 Unit and vents from Group 1 storage tanks through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1) the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)(1)]

- (2) In accordance with 40 CFR 63.2450(e)(2), the permittee shall comply with the requirements of 40 CFR 63.982(b) for the closed vent system and flare.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)(2)]

## d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the following:
  - a. The scrubber water flow rate through the venture portion of the scrubber shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation; and
  - b. The scrubber water flow rate through the packed bed portion of the scrubber shall be continuously maintained at a value of not less than 25 gallons per hour while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate through the venture portion of the scrubber (in gallons per minute), and the scrubber liquid flow rate through the packed bed portion of the scrubber (in gallons per hour) including periods of startup and shutdown. Flow rates shall be used recorded every fifteen minutes or less. The daily average flow rates shall be used to determine compliance with the minimum flow rates specified in d)(1)a. and b. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. The date and time the deviation began;
- b. The magnitude of the deviation at that time;
- c. The date the investigation was conducted;
- d. The name(s) of the personnel who conducted the investigation; and
- e. The findings and recommendations.

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

- f. A description of the corrective action;
- g. The date the corrective action was completed;
- h. The date and time the deviation ended;
- i. The total period of time (in minutes) during which there was a deviation;
- j. The flow rate readings immediately after the corrective action was implemented;  
and
- k. The name(s) of the person who coordinated the work.

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

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (3) The permittee shall record the results of each calibration check and all maintenance performed on the continuous parametric monitoring system as specified in 40 CFR 63.998(c)(1)(ii)(A).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(1)]

- (4) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:
  - a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow(make-up water);
  - b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D); and
  - c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(5)]

- (5) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(b)]

- (6) In accordance with 40 CFR 63.2525(f) through (g), the permittee shall maintain the following records:

- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
- b. Records of the results of each continuous parametric monitoring system calibration check and the maintenance performed, as specified in §63.2450(k)(1).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2525(f) through (g)]

- (7) In accordance with 40 CFR 63.987(c) the permittee shall install a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting that at least one pilot flame or the flare flame is present.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)]

- (8) In accordance with 40 CFR 63.998(a)(1)(i), the permittee shall maintain the following flare compliance assessment records:

- a. Flare design (i.e. steam-assisted, air-assisted, or non-assisted)
- b. All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the flare compliance assessment.
- c. All periods during the flare compliance assessment when all pilot flames are absent or, if only the flare flame is monitored, all periods when the flare flame is absent.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)]

- (9) In accordance with 40 CFR 63.998(a)(1)(ii), the permittee shall maintain up to date and readily accessible hourly records of whether the monitor is continuously operating and whether the flare flame or at least one pilot flame is continuously present.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)]

- (10) In accordance with 40 CFR 63.998(a)(1)(iii), the permittee shall maintain the following records:

- a. The times and duration of all periods during which the flare flame or all the pilot flames are absent.

b. The times and durations of all periods during which the monitor is not operating.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(e)]

(11) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping contained in Permit to Install PTI 14-01897, issued April 8, 2004: d)(1) - d)(10). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. Each period of time (start time and date, and end time and date) when the liquid flow rates were outside of the appropriate ranges or exceeded the applicable limits contained in this permit;
- b. Any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
- c. Each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
- d. Each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. Each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

(2) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.3.c) of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 63.2520(b) and (e)]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install PTI 14-01897, issued April 8, 2004: e)(1) - e(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- 3.53 lbs./hr. and 2.87 TPY of OC.
- Applicable Compliance Method:
- The hourly limit from the scrubber is determined by summing the controlled emissions from the process tanks and process vessels. Fugitive emissions are determined by summing the hourly emissions from uncontrolled process tanks and vessels. Emission factors and process flow rates are confidential. The hourly emission calculations take into account higher than normal emissions that occur during periodic operations such as tank loading and line clearing. The process is considered continuous, but higher hourly emissions will occur when these types of operations occur.
- b. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- The emission testing shall be conducted within 6 months after issuance of the permit. Testing frequency will be based on the previous test results and OEPA Engineering Guide #16.
- The emission testing shall be conducted to demonstrate compliance with the HAP emission limitations/control requirements specified in b)(2)c. and the OC control efficiency specified in b)(2)a. of the exiting scrubber.
- The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
- 40 CFR Part 60 Appendix A, Methods 1-4, and 18.
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.

The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install PTI 14-01897, issued 04/8/04: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) **Miscellaneous Requirements**

- (1) None.



5. P059, FATTY ALCOHOL UNITS 103/106/108

Operations, Property and/or Equipment Description:

Recovery and purification of methanol for in-process reuse and recycle.

- 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.
- 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) (PTI 14-04154, issued 02/12/04)	Organic Compound (OC) emissions from the scrubber shall not exceed 0.18 pound per hour.  Fugitive Organic Compound (OC) emissions shall not exceed 0.013 pound per hour.  Annual Organic Compound (OC) emissions shall not exceed 0.83 ton per year.  See b)(2)a.-b)(2)c.
b.	OAC rule 3745-21-13(F)	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
c.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)  [In accordance with 40 CFR 63.2550, this emissions unit contains Group 1 continuous process vents that are part of a combined emission stream subject to the emission limitations/control measures specified in 40 CFR 63.2450(c).]	See b)(2)d. and c)(1). See Sections B.7-B.10 of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2480).  See Section B.5 of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See Section B.6 of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475).
d.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. The wet scrubber controlling this emissions unit shall have a control efficiency of at least 80% by weight for condensable OC.

The control efficiency requirement for the scrubber established under OAC rule 3745-31-05(A)(3) is less stringent than the organic HAP reduction requirements established pursuant to 40 CFR Part 63, Subpart FFFF.

- b. The emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limits.
- c. The emissions from this emissions unit shall be vented to the wet scrubber at all times the emissions unit is in operation.
- d. In accordance with 40 CFR 63.2450(c)(2)(v), the permittee shall reduce total hazardous air pollutant (HAP) emissions by  $\geq 95$  percent by weight or to  $< 20$  ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents and vents from Group 1 storage tanks through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rules 3745-77-07(A)(1), 40 CFR Part 63.2450(e)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the following:

- a. The scrubber water flow rate through the venture portion of the scrubber shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation; and
- b. The scrubber water flow rate through the packed bed portion of the scrubber shall be continuously maintained at a value of not less than 25 gallons per hour while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate through the venture portion of the scrubber (in gallons per minute), and the scrubber liquid flow rate through the packed bed portion of the scrubber (in gallons per hour) including periods of startup and shutdown. Flow rates shall be recorded every fifteen minutes or less. The daily average flow rates shall be used to determine compliance with the minimum flow rates specified in (d)(1) a. and b. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. The date and time the deviation began;
- b. The magnitude of the deviation at that time;
- c. The date the investigation was conducted;
- d. The name(s) of the personnel who conducted the investigation; and
- e. The findings and recommendations.

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

- f. A description of the corrective action;
- g. The date the corrective action was completed;
- h. The date and time the deviation ended;
- i. The total period of time (in minutes) during which there was a deviation;

- j. The flow rate readings immediately after the corrective action was implemented;  
and
- k. The name(s) of the person who coordinated the work.

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

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (3) The permittee shall record the results of each calibration check and all maintenance performed on the continuous parametric monitoring system as specified in 40 CFR 63.998(c)(1)(ii)(A).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(1)]

- (4) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:
  - a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow(make-up water).
  - b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D).
  - c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(5)]

- (5) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(b)]

- (6) In accordance with 40 CFR 63.2525(f) through (g), the permittee shall maintain the following records:
  - a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).

- b. Records of the results of each continuous parametric monitoring system (CPMS) calibration check and the maintenance performed, as specified in §63.2450(k)(1).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(f) through (g)]

- (7) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping contained in Permit to Install PTI 14-04154, issued on February 12, 2004: d)(1)-d)(6). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Each period of time (start time and date, and end time and date) when the liquid flow rates were outside of the appropriate ranges or exceeded the applicable limits contained in this permit;
  - b. Any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
  - c. Each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. Each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. Each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

- (2) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.3.c) of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 63.2520(b) and (e)]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install PTI 14-04154, issued on February 12, 2004: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the

reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

0.18 lb./hr. of OC from the scrubber, 0.013 lb./hr. of OC fugitive, 0.83 TPY of OC.

Applicable Compliance Method:

The hourly limit from the scrubber is determined by summing the controlled emissions from the process tanks and process vessels. Fugitive emissions are determined by summing the hourly emissions from uncontrolled process tanks and vessels. Emission factors and process flow rates are confidential. The hourly emission calculations take into account higher than normal emissions that occur during periodic operations such as tank loading and line clearing. The process is considered continuous, but higher hourly emissions will occur when these types of operations occur. Annual emissions were determined using the emissions unit's maximum production capacity and hours of operation, 8760 hr/yr. If required, the mass rate of emissions shall be determined using Method 25 of 40 CFR 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) ]

b. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within 6 months after issuance of the permit. Testing frequency will be based on the previous test results and OEPA Engineering Guide #16.

The emission testing shall be conducted to demonstrate compliance with the HAP emission limitations/control requirements specified in b)(2)d. and the OC control efficiency specified in b)(2)a. exiting the scrubber.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60 Appendix A, Methods 1-4, and 18.

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

During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.

The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install PTI 14-04154, issued 02/12/04: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



6. P064, ESTER STILL AND REFINING

Operations, Property and/or Equipment Description:

Distillation and refining of ester raw materials, intermediates, and products.

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 3745-21-14(C)(3)(b)	See b)(2)a.

(2) Additional Terms and Conditions

a. This emissions unit is a batch process train containing process vents that have, in aggregate, uncontrolled total annual mass emissions, of less than thirty thousand pounds per year of VOC for all products manufactured in such batch process train. Therefore, it is exempt from the control requirements of paragraph (D) of OAC rule 3745-21-14 but is still subject to the requirements in paragraphs (H), (I) and (K) of this rule pertaining to recordkeeping, reporting, applicability notification, and permit application.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the uncontrolled total annual mass emissions for this emissions unit, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, and measurements made in accordance with paragraph (F) of OAC rule 3745-21-14, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the permit pertaining to the unit operation or batch process train.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-21-14]

e) Reporting Requirements

- (1) In accordance with OAC rule 3745-21-14(H)(6), the permittee shall notify the director in writing if the uncontrolled total annual mass emissions from this emissions unit exceeds the threshold specified in OAC rule 3745-21-14(C)(3)(b), within sixty days after the event occurs. Such notification shall include a copy of all records of such event.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-21-14]

f) Testing Requirements

- (1) None.

g) Miscellaneous Requirements

- (1) None.



7. T008 (751T09) and T009 (751T10) METHANOL STORAGE TANKS

Operations, Property and/or Equipment Description:

Methanol storage for fatty alcohol process.

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) (PTI 14-01897, issued April 8, 2004)	Organic Compound (OC) emissions shall not exceed 6.47 pounds per day and 1.18 tons per year.  See b)(2)a. and b)(2)b.  The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 and Subpart.
b.	40 CFR 60 Subpart Kb	See d)(4), d)(5), and e)(2).
c.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550)  accordance with 40 CFR 63.2550, these emissions units are Group 1 storage tanks that are part of a combined emission stream subject to the emission limitations/control measures specified in 40 CFR 63.2450(c).]	See b)(2)c., and c)(1).
d.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

- (2) Additional Terms and Conditions
- a. The wet scrubber controlling this emissions unit shall have a control efficiency of at least 80% by weight for condensable OC.
  - b. The emissions from this emissions unit shall be vented to the wet scrubber at all times the emissions unit is in operation.
  - c. In accordance with 40 CFR 63.2450(c)(2)(v), the permittee shall reduce total hazardous air pollutant (HAP) emissions by  $\geq 95$  percent by weight or to  $< 20$  ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents and vents from Group 1 storage tanks through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rules 3745-77-07(A)(1), 40 CFR Part 63 Subpart FFFF]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the following:

- a. The scrubber water flow rate through the venture portion of the scrubber shall be continuously maintained at a value of not less than 75 gallons per minute at all times while the emissions unit is in operation.
- b. The scrubber water flow rate through the packed bed portion of the scrubber shall be continuously maintained at a value of not less than 25 gallons per hour while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate through the venture portion of the scrubber (in gallons per minute), and the scrubber liquid flow rate through the packed bed portion of the scrubber (in gallons per hour) including periods of startup and shutdown. Flow rates shall be recorded every fifteen minutes or less. The daily average flow rates shall be used to determine compliance with the minimum flow rates specified in (d)(1) a. and b. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. The date and time the deviation began;
- b. The magnitude of the deviation at that time;
- c. The date the investigation was conducted;
- d. The name(s) of the personnel who conducted the investigation; and
- e. The findings and recommendations.

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

- f. A description of the corrective action;
- g. The date the corrective action was completed;
- h. The date and time the deviation ended;
- i. The total period of time (in minutes) during which there was a deviation;
- j. The flow rate readings immediately after the corrective action was implemented; and
- k. The name(s) of the person who coordinated the work.

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

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

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3)]

- (3) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:

- a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow (make-up water).
- b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D).
- c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63.2450(k)(5)]

- (4) In accordance with 40 CFR Part 60.116b(a) and (b), the permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 60, Subpart Kb]

- (5) In accordance with 40 CFR Part 60.116b(c) the permittee shall keep readily accessible records of the following:
  - a. Identification of the volatile organic liquid stored.
  - b. The period of storage.
  - c. The maximum true vapor of the volatile organic liquid stored.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 60, Subpart Kb]

- (6) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(b)]

- (7) In accordance with 40 CFR 63.2525(f) through (g), the permittee shall maintain the following records:
  - a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
  - b. Records of the results of each continuous parametric monitoring system calibration check and the maintenance performed, as specified in §63.2450(k)(1).

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 63 63.2525(f) through (g)]

- (8) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping contained in Permit to Install PTI 14-01897, issued on April 08, 2004: d)(1) - d)(7). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements

constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Each period of time (start time and date, and end time and date) when the liquid flow rates were outside of the appropriate ranges or exceeded the applicable limits contained in this permit;
  - b. Any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
  - c. Each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. Each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. Each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3)]

- (2) The permittee shall notify the Department of Environmental Services within 30 days if a material is stored in this emissions unit with a vapor pressure greater than 27.6 kPa.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR Part 60, Subpart Kb]

- (3) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.3.c) of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 63.2520(b) and (e)]

- (4) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install PTI 14-01897, issued on April 08, 2004: d)(1)-d)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

6.47 lbs./day of OC, 1.18 TPY of OC.

Applicable Compliance Method:

The daily emission limitation is determined by using emissions factors and production factors as submitted in confidential PTI 14-01897. The annual emissions were determined by summing the daily emissions and dividing by 2000 pounds per ton.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3)]

b. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within 6 months after issuance of the permit. Testing frequency will be based on the previous test results and OEPA Engineering Guide #16.

The emission testing shall be conducted to demonstrate compliance with the HAP emission limitations/control requirements specified in b)(2)c. and the OC control efficiency specified in b)(2)a. of the exiting scrubber.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60 Appendix A, Methods 1-4, and 18.

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

During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.

The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install PTI 14-01897, issued 04/08/04: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) **Miscellaneous Requirements**

- (1) None.



8. P119, Industrial Lube Blending Process

Operations, Property and/or Equipment Description:

Industrial Lube Blending Process

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 operations(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. 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) (PTI P0107815)	Volatile organic compound (VOC) emissions from process vents and fugitive sources shall not exceed 63.1 pounds per batch.
b.	OAC rule 3745-21-14(C)(3)(b)	Exempt from emission control. See d)1. and e)2.

(2) Additional Terms and Conditions

a. The emission limitation outlined above is based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with this limit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain annual records of the uncontrolled total mass VOC emissions for this emissions unit as outlined in OAC rule 3745-21-14(H).

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-21-14]

(2) The permittee shall maintain monthly records of the number of batches blended in emissions unit P119.

[Authority for term: OAC rules 3745-77-07(C)(1), ORC 3704.03(T)]

Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and recordkeeping requirements are as stringent as or more stringent than the monitoring and recordkeeping contained in Permit to Install P0107815, issued on April 14, 2011: d)(1)-d)(2). The monitoring and recordkeeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and recordkeeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and recordkeeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Hamilton County Department of Environmental Services in writing if the uncontrolled total annual mass emissions from this emissions unit exceed the limitation outlined in OAC rule 3745-21-14(C)(3)(b). The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 60 days after the event occurs.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-21-14]

- (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing if the VOC emissions exceed the 63.1 pounds per batch limitation in b)(1).

[Authority for term: OAC rules 3745-77-07(C)(1), ORC 3704.03(T)]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install Permit to Install P0107815, issued on April 14, 2011: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Volatile organic compound (VOC) emissions from process vents and fugitive sources shall not exceed 63.1 pounds per batch.

Applicable Compliance Method:

The VOC emissions limitation is based on the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in the Stars 2 PTI/PTIO application number A0041190.

The process vent emissions and the total fugitive emissions shall be added to derive the total hourly emission rate.

For Hourly Vent Emissions

Emissions are by saturation of noncondensibles by displacement, which has three causes for each batch:

1. Liquid flowing into tank displaces an equal volume of nitrogen to the atmosphere saturated with the organics in proportion to Raoult's Law at maximum expected handling temperature.
2. Each batch transferred was calculated to have a final line clearing using nitrogen blown through the pipe.
3. Batches are purged with nitrogen, assumed to leave the vent saturated with organics in proportion to Raoult's Law at maximum expected handling temperature.

These are summed to get Total Noncondensibles Displaced per Batch (NC<sub>tot</sub>) as follows:

Calculation of NC<sub>tot</sub>

$$NC_{tot} = NC1 + NC2 + NC3$$

1. Liquid Displacement Cause (NC1) Expected Production (lbs/year) / density (lbs/ft<sup>3</sup>) x 492°F / 520°F (correction to standard conditions) = scf / year
2. Line Blow Cause (NC2) N<sub>2</sub> Blow Rate (sonic velocity limited blow in scfh) x Blow Time (2 min = 0.03 hrs) x 1 Blow/Batch x Batches/Year = scf / year
3. Nitrogen Purge (NC3) N<sub>2</sub> Purge Rate (scfh) x 8760 hours/year x Tank Utilization % = scf / yr Tank Utilization = Batch Time (lbs produced x cycle time / batch size) + Loading Time (lbs produced x loading time / truck size)

Emissions per batch calculated as follows:

Partial Pressure of Noncondensable = System Pressure - Partial Pressures of Organic Component

$$PP_{nc} = P_{sys} - PP_{org}$$

Ideal behavior was assumed; so, at standard conditions for a gas, 1 lbmole = 359 standard cubic feet (scf)

Emissions per Batch = NC<sub>tot</sub> (scf) x PP<sub>org</sub> / PP<sub>nc</sub> x 1 lbmole / 359 scf x Molecular Weight of Component = lbs/batch

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 25 of 40 CFR, Part 60, Appendix A.

Applicable Compliance Method For Hourly Fugitive Emissions:

Fugitive emissions are determined using SOCMF Factors taken from Table 2 on page 320 of Encyclopedia of Chemical Processing and Design: Volume 43 and the following formula:

$$E_{\text{TOC}} = F_A \times W_{\text{F}_{\text{TOC}}} \times N$$

Where:  $E_{\text{TOC}}$  = Emission rate of TOC from all equipment in the stream of a given equipment type (lb/hr);

$F_A$  = applicable average emission factor for equipment type (lb/hr per source);

$W_{\text{F}_{\text{TOC}}}$  = average weight fraction of TOC in the stream;

$N$  = number of pieces of equipment in the stream.

Convert to lbs/batch based on hours it takes to produce a batch

[Authority for term: OAC rules 3745-77-07(C)(1), ORC 3704.03(T)]

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install Permit to Install P0107815, issued on April 14, 2011: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.
- g) Miscellaneous Requirements
- (1) None.