



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
Columbus, OH 43216-1049

07/31/03

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

05-75-01-0161  
Thermoseal Inc.  
J. Robert Leighty  
2350 Campbell Road  
Sidney, OH 45365-9573

Dear J. Robert Leighty:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Southwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Southwest District Office.**

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA (electronically submitted)  
File, DAPC PMU  
Southwest District Office  
Indiana



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 07/31/03

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 05-75-01-0161 to:
Thermoseal Inc.
2350 Campbell Road
Sidney, OH 45365-9573

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include P001 (Mixer #1), P002 (Calender #1), P003 (Calender #2), P004 (Calender #3), P005 (Calender #4), P008 (Mixer #3), P009 (Mixer #4), P011 (Mixer #2), P013 (Ethanol Distillation), P015 (Calender #5), P016 (Lurgi Toluene Decanting), P017 (Croftshaw Toluene Decanting), P018 (Vulcan Toluene Decanting), and P019 (Sealex Manufacturing).

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
(513) 285-6357

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

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

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. 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:

- i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

- ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. 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. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) 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 deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement 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. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

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

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

- iv. 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))

**2. 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 unit(s) 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 OAC rule 3745-15-06, 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).

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

**3. 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))

**4. 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))

**5. 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))

**6. 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 A.10 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.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. 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))*

**8. 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))*

**9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

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

**10. 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))*

## **11. 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))*

## **12. 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:
  - i. 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.
  - ii. 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.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. 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:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. 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:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. 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.
  - iii. 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))*

### **13. 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))*

### **14. 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))*

#### **15. 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))*

#### **16. 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 emission 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.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

**17. 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.)*

**18. Insignificant Activities**

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

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

**19. 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))*

**20. 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))*

**B. *State Only Enforceable Section***

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

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 quarterly, i.e., 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.)

**2. Records Retention Requirements**

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.

**3. 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.

**4. 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).

**5. 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.

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

1. The following emissions units are subject to 40 CFR, Part 60, Subpart VV--Standards of performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry: P016, P017 and P018.

Sec. 60.480 Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in Sec. 60.481) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d)(1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in Sec. 60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from Sec. 60.482.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from Sec. 60.482.

(4) Any affected facility that produces beverage alcohol is exempt from Sec. 60.482.

(5) Any affected facility that has no equipment in VOC service is exempt from Sec. 60.482.

(e) Alternative means of compliance--(1) Option to comply with part 65. Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of Secs. 60.482

through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of Sec. 60.485(d), (e), and

(f), and Sec. 60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(2) Part 60, subpart A. Owners or operators who choose to comply with 40 CFR part 65,

**A. State and Federally Enforcable Section (continued)**

Sec. 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation:  $P = R \times A$ , where

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$$A = Y \times (B / 100);$$

(2) The percent Y is determined from the following equation:  $Y = 1.0 - 0.575 \log X$ , where X is 1982 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

Table for Determining Applicable for B

Value of B Subpart applicable to facility in equation	to be used
VV.....	12.5
DDD.....	12.5
GGG.....	7.0
KKK.....	4.5

**A. State and Federally Enforcable Section (continued)**

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007-2900).

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in Sec. 60.485(e).

**A. State and Federally Enforcable Section (continued)**

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of Sec. 60.485(d) specify how to determine that a piece of equipment is not in VOC service.)

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in Sec. 60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

**A. State and Federally Enforcable Section (continued)**

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in Sec. 60.489.

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in Sec. 60.2 Definitions.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 49 FR 26738, June 29, 1984; 60 FR 43258, Aug. 18, 1995; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of Secs. 60.482-1 through 60.482-10 or Sec. 60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with Secs. 60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in Sec. 60.485.

(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of Secs. 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided in Sec. 60.484.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of Secs. 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of Secs. 60.482-2 to 60.482-10 if it is identified as required in Sec. 60.486(e)(5).

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 78276, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-2 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Sec. 60.485(b), except as provided in Sec. 60.482-1(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), Provided the following requirements are met:

(1) Each dual mechanical seal system is--

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Sec. 60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

**A. State and Federally Enforcable Section (continued)**

- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
- (5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and
- (ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.
- (ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.
- (iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) Any pump that is designated, as described in Sec. 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:
  - (1) Has no externally actuated shaft penetrating the pump housing,
  - (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Sec. 60.485(c), and
  - (3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

**A. State and Federally Enforcable Section (continued)**

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of Sec. 60.482-10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in Sec. 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-3 Standards: Compressors.

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in Sec. 60.482-1(c) and paragraph (h) and (i) of this section.
- (b) Each compressor seal system as required in paragraph (a) shall be:
  - (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
  - (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Sec. 60.482-10; or
  - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- (c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
- (d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e)(1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.
- (2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.
- (g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

**A. State and Federally Enforcable Section (continued)**

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of Sec. 60.482-10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in Sec. 60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in Sec. 60.485(c); and  
(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of Sec. 60.14 or Sec. 60.15 is exempt from Sec. 60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in Sec. 60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in Sec. 60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in Sec. 60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in Sec. 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Sec. 60.482-9.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-5 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in Sec. 60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:

(1) Return the purged process fluid directly to the process line; or  
(2) Collect and recycle the purged process fluid to a process; or  
(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of Sec. 60.482-10; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[60 FR 43258, Aug. 18, 1995, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in Sec. 60.482-1(c).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in Sec. 60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), Sec. 60.483-1, 2, and Sec. 60.482-1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Sec. 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in Sec. 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Sec. 60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

**A. State and Federally Enforcable Section (continued)**

(g) Any valve that is designated, as described in Sec. 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

- (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
- (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in Sec. 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

- (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- (2) The process unit within which the valve is located either becomes an affected facility through Sec. 60.14 or Sec. 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
- (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61762, Oct. 17, 2000]

Sec. 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

- (1) The owner or operator shall monitor the equipment within 5 days by the method specified in Sec. 60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.
  - (2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.
- (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under Sec. 60.482-7(e).

[48 CFR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-9 Standards: Delay of repair.

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- (c) Delay of repair for valves will be allowed if:
  - (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
  - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Sec. 60.482-10.
- (d) Delay of repair for pumps will be allowed if:
  - (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
  - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.482-10 Standards: Closed vent systems and control devices.

- (a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.
- (b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
- (c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 [deg]C.
- (d) Flares used to comply with this subpart shall comply with the requirements of Sec. 60.18.
- (e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
- (f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.
  - (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:
    - (i) Conduct an initial inspection according to the procedures in Sec. 60.485(b); and
    - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
  - (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
    - (i) Conduct an initial inspection according to the procedures in Sec. 60.485(b); and
    - (ii) Conduct annual inspections according to the procedures in Sec. 60.485(b).
- (g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.
  - (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
  - (2) Repair shall be completed no later than 15 calendar days after the leak is detected.
- (h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

**A. State and Federally Enforcable Section (continued)**

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

**A. State and Federally Enforcable Section (continued)**

- (2) The process unit within which the closed vent system is located becomes an affected facility through Secs. 60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
- (3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- (l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.
  - (1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
  - (2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
  - (3) For each inspection during which a leak is detected, a record of the information specified in Sec. 60.486(c).
  - (4) For each inspection conducted in accordance with Sec. 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
  - (5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[48 FR 48335, Oct. 18, 1983, as amended at 51 FR 2702, Jan. 21, 1986; 60 FR 43258, Aug. 18, 1995; 61 FR 29878, June 12, 1996; 65 FR 78277, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.483-1 Alternative standards for valves--allowable percentage of valves leaking.

- (a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
- (b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:
  - (1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in Sec. 60.487(d).
  - (2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.
  - (3) If a valve leak is detected, it shall be repaired in accordance with Sec. 60.482-7(d) and (e).
- (c) Performance tests shall be conducted in the following manner:
  - (1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in Sec. 60.485(b).
  - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - (3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.
- (d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.483-2 Alternative standards for valves--skip period leak detection and repair.

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in Sec. 60.487(d).

(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in Sec. 60.482-7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in Sec. 60.482-7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.484 Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

**A. State and Federally Enforcable Section (continued)**

(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).

(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

(e)(1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.

(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

(f)(1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e).

**A. State and Federally Enforcable Section (continued)**

Sec. 60.485 Test methods and procedures.

(a) In conducting the performance tests required in Sec. 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in Sec. 60.8(b).

(b) The owner or operator shall determine compliance with the standards in Secs. 60.482, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The owner or operator shall determine compliance with the no detectable emission standards in Secs. 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

**A. State and Federally Enforcable Section (continued)**

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference--see Sec. 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 [deg]C (1.2 in. H<sub>2</sub>O at 68 [deg]F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference--see Sec. 60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 [deg]C (1.2 in. H<sub>2</sub>O at 68 [deg]F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 shall be used to determine visible emissions.

**A. State and Federally Enforcable Section (continued)**

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 \times H_t$$

where:

$V_{max}$  = maximum permitted velocity, m/sec (ft/sec)

$H_t$  = Net heating value of the gas being combusted MJ/scm (Btu/scf)

$K_1$  = 8.706 m/s (28.56 ft/sec)

$K_2$  = 0.7084 m<sup>4</sup>/(MJ-sec) (0.087 ft<sup>4</sup>/(Btu-sec))

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_t = K \times [\text{summation (from } n=1 \text{ to } n=1 \text{) of } (C_i \times H_i)]$$

where,

$K$  = conversion constant,  $1.74 \times 10^7$  (g-mole)(MJ)/(ppm-scm-kcal [ $4.674 \times 10^8$  (g-mole)(Btu)/(ppm-scf-kcal)])

$C_i$  = concentration of sample component "i" ppm

$H_i$  = net heat of combustion of sample component "i" at 25 degr. C and 760 mmHg

(5) Method 18 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference--see Sec. 60.17) shall be used to determine the concentration of sample component "i."

(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference--see Sec. 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

[54 FR 6678, Feb. 14, 1989, as amended at 54 FR 27016, June 27, 1989; 65 FR 61763, Oct. 17, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.486 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in Secs. 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Sec. 60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in Secs. 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in Sec. 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in Sec. 60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in Sec. 60.482-10(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.

**A. State and Federally Enforcable Section (continued)**

(4) Periods when the closed vent systems and control devices required in Secs. 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in Secs. 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in Secs. 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of Secs. 60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of Sec. 60.482-2(e), Sec. 60.482-3(i), or Sec. 60.482-7(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Sec. 60.482-4.

(4)(i) The dates of each compliance test as required in Secs. 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of Sec. 60.482-7(g) and (h) and to all pumps subject to the requirements of Sec. 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

**A. State and Federally Enforcable Section (continued)**

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with Sec. 60.483-2:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

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

(1) Design criterion required in Secs. 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in Sec. 60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of Sec. 60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.487 Reporting requirements.

- (a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.
- (b) The initial semiannual report to the Administrator shall include the following information:
  - (1) Process unit identification.
  - (2) Number of valves subject to the requirements of Sec. 60.482-7, excluding those valves designated for no detectable emissions under the provisions of Sec. 60.482-7(f).
  - (3) Number of pumps subject to the requirements of Sec. 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of Sec. 60.482-2(e) and those pumps complying with Sec. 60.482-2(f).
  - (4) Number of compressors subject to the requirements of Sec. 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of Sec. 60.482-3(i) and those compressors complying with Sec. 60.482-3(h).
- (c) All semiannual reports to the Administrator shall include the following information, summarized from the information in Sec. 60.486:
  - (1) Process unit identification.
  - (2) For each month during the semiannual reporting period,
    - (i) Number of valves for which leaks were detected as described in Sec. 60.482(7)(b) or Sec. 60.483-2,
    - (ii) Number of valves for which leaks were not repaired as required in Sec. 60.482-7(d)(1),
    - (iii) Number of pumps for which leaks were detected as described in Sec. 60.482-2(b) and (d)(6)(i),
    - (iv) Number of pumps for which leaks were not repaired as required in Sec. 60.482-2(c)(1) and (d)(6)(ii),
    - (v) Number of compressors for which leaks were detected as described in Sec. 60.482-3(f),

**A. State and Federally Enforcable Section (continued)**

- (vi) Number of compressors for which leaks were not repaired as required in Sec. 60.482-3(g)(1), and
- (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) An owner or operator electing to comply with the provisions of Secs. 60.483-1 or 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (e) An owner or operator shall report the results of all performance tests in accordance with Sec. 60.8 of the General Provisions. The provisions of Sec. 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.
- (f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61763, Oct. 17, 2000]

**Sec. 60.488 Reconstruction.**

For the purposes of this subpart:

- (a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable new facility" under Sec. 60.15: pump seals, nuts and bolts, rupture disks, and packings.
- (b) Under Sec. 60.15, the "fixed capital cost of new components" includes the fixed capital cost of all depreciable components (except components specified in Sec. 60.488 (a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

[49 FR 22608, May 30, 1984]

**A. State and Federally Enforcable Section (continued)**

Sec. 60.489 List of chemicals produced by affected facilities.

The following chemicals are produced, as intermediates or final products, by process units covered under this subpart. The applicability date for process units producing one or more of these chemicals is January 5, 1981.

CAS No. <SUP>a</SUP>	Chemical
105-57-7.....	Acetal.
75-07-0.....	Acetaldehyde.
107-89-1.....	Acetaldol.
60-35-5.....	Acetamide.
103-84-4.....	Acetanilide.
64-19-7.....	Acetic acid.
108-24-7.....	Acetic anhydride.
67-64-1.....	Acetone.
75-86-5.....	Acetone cyanohydrin.
75-05-8.....	Acetonitrile.
98-86-2.....	Acetophenone.
75-36-5.....	Acetyl chloride.
74-86-2.....	Acetylene.
107-02-8.....	Acrolein.
79-06-1.....	Acrylamide.
79-10-7.....	Acrylic acid.
107-13-1.....	Acrylonitrile.
124-04-9.....	Adipic acid.
111-69-3.....	Adiponitrile.
(b).....	Alkyl naphthalenes.
107-18-6.....	Allyl alcohol.
107-05-1.....	Allyl chloride.
1321-11-5.....	Aminobenzoic acid.
111-41-1.....	Aminoethylethanolamine.
123-30-8.....	p-Aminophenol.
628-63-7, 123-92-2.....	Amyl acetates.
71-41-0 (c).....	Amyl alcohols.
110-58-7.....	

**A. State and Federally Enforcable Section (continued)**

65-85-0.....	Benzoic acid.
119-53-9.....	Benzoin.
100-47-0.....	Benzonitrile.
119-61-9.....	Benzophenone.
98-07-7.....	Benzotrichloride.
98-88-4.....	Benzoyl chloride.
100-51-6.....	Benzyl alcohol.
100-46-9.....	Benzylamine.
120-51-4.....	Benzyl benzoate.
100-44-7.....	Benzyl chloride.
98-87-3.....	Benzyl dichloride.
92-52-4.....	Biphenyl.
80-05-7.....	Bisphenol A.
10-86-1.....	Bromobenzene.
27497-51-4.....	Bromonaphthalene.
106-99-0.....	Butadiene.
106-98-9.....	1-butene.
123-86-4.....	n-butyl acetate.
141-32-2.....	n-butyl acrylate.
71-36-3.....	n-butyl alcohol.
78-92-2.....	s-butyl alcohol.
75-65-0.....	t-butyl alcohol.
109-73-9.....	n-butylamine.
13952-84-6.....	s-butylamine.
75-64-9.....	t-butylamine.
98-73-7.....	p-tert-butyl benzoic acid.
107-88-0.....	1,3-butylene glycol.
123-72-8.....	n-butyraldehyde.
107-92-6.....	Butyric acid.
106-31-0.....	Butyric anhydride.
109-74-0.....	Butyronitrile.
105-60-2.....	Caprolactam.

**A. State and Federally Enforcable Section (continued)**

75-1-50.....	Carbon disulfide.
558-13-4.....	Carbon tetrabromide.
56-23-5.....	Carbon tetrachloride.
9004-35-7.....	Cellulose acetate.
79-11-8.....	Chloroacetic acid.
108-42-9.....	m-chloroaniline.
95-51-2.....	o-chloroaniline.
106-47-8.....	p-chloroaniline.
35913-09-8.....	Chlorobenzaldehyde.
108-90-7.....	Chlorobenzene.
118-91-2, 535-80-8, 74-11-3 (c).....	Chlorobenzoic acid.
2136-81-4, 2136-89-2, 5216-25-1 (c)....	Chlorobenzotrichloride.
1321-03-5.....	Chlorobenzoyl chloride.
25497-29-4.....	Chlorodifluoromethane.
75-45-6.....	Chlorodifluoroethane.
67-66-3.....	Chloroform.
25586-43-0.....	Chloronaphthalene.
88-73-3.....	o-chloronitrobenzene.
100-00-5.....	p-chloronitrobenzene.
25167-80-0.....	Chlorophenols.
126-99-8.....	Chloroprene.
7790-94-5.....	Chlorosulfonic acid.
108-41-8.....	m-chlorotoluene.
95-49-8.....	o-chlorotoluene.
106-43-4.....	p-chlorotoluene.
75-72-9.....	Chlorotrifluoromethane.
108-39-4.....	m-cresol.

**A. State and Federally Enforcable Section (continued)**

95-48-7.....	o-cresol.
106-44-5.....	p-cresol.
1319-77-3.....	Mixed cresols.
1319-77-3.....	Cresylic acid.
4170-30-0.....	Crotonaldehyde.
3724-65-0.....	Crotonic acid.
98-82-8.....	Cumene.
80-15-9.....	Cumene hydroperoxide.
372-09-8.....	Cyanoacetic acid.
506-77-4.....	Cyanogen chloride.
108-80-5.....	Cyanuric acid.
108-77-0.....	Cyanuric chloride.
110-82-7.....	Cyclohexane.
108-93-0.....	Cyclohexanol.
108-94-1.....	Cyclohexanone.
110-83-8.....	Cyclohexene.
108-91-8.....	Cyclohexylamine.
111-78-4.....	Cyclooctadiene.
112-30-1.....	Decanol.
123-42-2.....	Diacetone alcohol.
27576-04-1.....	Diaminobenzoic acid.
95-76-1, 95-82-9, 554-00-7, 608-27-5, 608-31-1, 626-43-7, 27134-27-6, 57311-92-9 (c).	Dichloroaniline.
541-73-1.....	m-dichlorobenzene.
95-50-1.....	o-dichlorobenzene.
106-46-7.....	p-dichlorobenzene.
75-71-8.....	Dichlorodifluoromethane.
111-44-4.....	Dichloroethyl ether.
107-06-2.....	1,2-dichloroethane (EDC).
96-23-1.....	Dichlorohydrin.
26952-23-8.....	Dichloropropene.
101-83-7.....	Dicyclohexylamine.

**A. State and Federally Enforcable Section (continued)**

109-89-7.....	Diethylamine.
111-46-6.....	Diethylene glycol.
112-36-7.....	Diethylene glycol diethyl ether.
111-96-6.....	Diethylene glycol dimethyl ether.
112-34-5.....	Diethylene glycol monobutyl ether.
124-17-4.....	Diethylene glycol monobutyl ether acetate.
111-90-0.....	Diethylene glycol monoethyl ether.
112-15-2.....	Diethylene glycol monoethyl ether acetate.
111-77-3.....	Diethylene glycol monomethyl ether.
64-67-5.....	Diethyl sulfate.
75-37-6.....	Difluoroethane.
25167-70-8.....	Diisobutylene.
26761-40-0.....	Diisodecyl phthalate.
27554-26-3.....	Diisooctyl phthalate.
674-82-8.....	Diketene.
124-40-3.....	Dimethylamine.
121-69-7.....	N,N-dimethylaniline.
115-10-6.....	N,N-dimethyl ether.
68-12-2.....	N,N-dimethylformamide.
57-14-7.....	Dimethylhydrazine.
77-78-1.....	Dimethyl sulfate.
75-18-3.....	Dimethyl sulfide.
67-68-5.....	Dimethyl sulfoxide.
120-61-6.....	Dimethyl terephthalate.
99-34-3.....	3,5-dinitrobenzoic acid.
51-28-5.....	Dinitrophenol.
25321-14-6.....	Dinitrotoluene.
123-91-1.....	Dioxane.

**A. State and Federally Enforcable Section (continued)**

646-06-0.....	Dioxilane.
122-39-4.....	Diphenylamine.
101-84-8.....	Diphenyl oxide.
102-08-9.....	Diphenyl thiourea.
25265-71-8.....	Dipropylene glycol.
25378-22-7.....	Dodecene.
28675-17-4.....	Dodecylaniline.
27193-86-8.....	Dodecylphenol.
106-89-8.....	Epichlorohydrin.
64-17-5.....	Ethanol.
141-43-5 (c).....	Ethanolamines.
141-78-6.....	Ethyl acetate.
141-97-9.....	Ethyl acetoacetate.
140-88-5.....	Ethyl acrylate.
75-04-7.....	Ethylamine.
100-41-4.....	Ethylbenzene.
74-96-4.....	Ethyl bromide.
9004-57-3.....	Ethylcellulose.
75-00-3.....	Ethyl chloride.
105-39-5.....	Ethyl chloroacetate.
105-56-6.....	Ethylcyanoacetate.
74-85-1.....	Ethylene.
96-49-1.....	Ethylene carbonate.
107-07-3.....	Ethylene chlorohydrin.
107-15-3.....	Ethylenediamine.
106-93-4.....	Ethylene dibromide.
107-21-1.....	Ethylene glycol.
111-55-7.....	Ethylene glycol diacetate.
110-71-4.....	Ethylene glycol dimethyl ether.
111-76-2.....	Ethylene glycol monobutyl ether.
112-07-2.....	Ethylene glycol monobutyl ether acetate.
110-80-5.....	Ethylene glycol monoethyl ether.
111-15-9.....	Ethylene glycol monethyl ether

**A. State and Federally Enforcable Section (continued)**

109-86-4.....	Ethylene glycol monomethyl ether.
110-49-6.....	Ethylene glycol monomethyl ether acetate.
122-99-6.....	Ethylene glycol monophenyl ether.
2807-30-9.....	Ethylene glycol monopropyl ether.
75-21-8.....	Ethylene oxide.
60-29-7.....	Ethyl ether
104-76-7.....	2-ethylhexanol.
122-51-0.....	Ethyl orthoformate.
95-92-1.....	Ethyl oxalate.
41892-71-1.....	Ethyl sodium oxalacetate.
50-00-0.....	Formaldehyde.
75-12-7.....	Formamide.
64-18-6.....	Formic acid.
110-17-8.....	Fumaric acid.
98-01-1.....	Furfural.
56-81-5.....	Glycerol.
26545-73-7.....	Glycerol dichlorohydrin.
25791-96-2.....	Glycerol triether.
56-40-6.....	Glycine.
107-22-2.....	Glyoxal.
118-74-1.....	Hexachlorobenzene.
67-72-1.....	Hexachloroethane.
36653-82-4.....	Hexadecyl alcohol.
124-09-4.....	Hexamethylenediamine.
629-11-8.....	Hexamethylene glycol.
100-97-0.....	Hexamethylenetetramine.
74-90-8.....	Hydrogen cyanide.
123-31-9.....	Hydroquinone.
99-96-7.....	p-hydroxybenzoic acid.
26760-64-5.....	Isoamylene.
78-83-1.....	Isobutanol.
110-19-0.....	Isobutyl acetate.

**A. State and Federally Enforcable Section (continued)**

- 115-11-7..... Isobutylene.
- 78-84-2..... Isobutyraldehyde.
- 79-31-2..... Isobutyric acid.
- 25339-17-7..... Isodecanol.
- 26952-21-6..... Isooctyl alcohol.
- 78-78-4..... Isopentane.
- 78-59-1..... Isophorone..
- 121-91-5..... Isophthalic acid..
- 78-79-5..... Isoprene.
- 67-63-0..... Isopropanol.
- 108-21-4..... Isopropyl acetate.
- 75-31-0..... Isopropylamine.
- 75-29-6..... Isopropyl chloride.
- 25168-06-3..... Isopropylphenol.
- 463-51-4..... Ketene.
- (b)..... Linear alkyl sulfonate..
- 123-01-3..... Linear alkylbenzene (linear  
dodecylbenzene)..
- 110-16-7..... Maleic acid.
- 108-31-6..... Maleic anhydride.
- 6915-15-7..... Malic acid.
- 141-79-7..... Mesityl oxide.
- 121-47-1..... Metanilic acid.
- 79-41-4..... Methacrylic acid.
- 563-47-3..... Methallyl chloride.
- 67-56-1..... Methanol.

**A. State and Federally Enforcable Section (continued)**

79-20-9.....	Methyl acetate.
105-45-3.....	Methyl acetoacetate.
74-89-5.....	Methylamine.
100-61-8.....	n-methylaniline.
74-83-9.....	Methyl bromide.
37365-71-2.....	Methyl butynol.
74-87-3.....	Methyl chloride. .
108-87-2.....	Methylcyclohexane.
1331-22-2.....	Methylcyclohexanone.
75-09-2.....	Methylene chloride.
101-77-9.....	Methylene dianiline.
101-68-8.....	Methylene diphenyl diisocyanate.
78-93-3.....	Methyl ethyl ketone.
107-31-3.....	Methyl formate.
108-11-2.....	Methyl isobutyl carbinol.
108-10-1.....	Methyl isobutyl ketone.
80-62-6.....	Methyl methacrylate.
77-75-8.....	Methylpentynol.
98-83-9.....	a-methylstyrene.
110-91-8.....	Morpholine.
85-47-2.....	a-naphthalene sulfonic acid.
120-18-3.....	b-naphthalene sulfonic acid .
90-15-3.....	a-naphthol.
135-19-3.....	b-naphthol.
75-98-9.....	Neopentanoic acid.
88-74-4.....	o-nitroaniline.
100-01-6.....	p-nitroaniline.
91-23-6.....	o-nitroanisole.
100-17-4.....	p-nitroanisole.
98-95-3.....	Nitrobenzene.
27178-83-2 (c) .....	Nitrobenzoic acid (o,m, and p).
79-24-3.....	Nitroethane.
75-52-5.....	Nitromethane.

**A. State and Federally Enforcable Section (continued)**

88-75-5.....	2-Nitrophenol.
25322-01-4.....	Nitropropane.
1321-12-6.....	Nitrotoluene.
27215-95-8.....	Nonene.
25154-52-3.....	Nonylphenol.
27193-28-8.....	Octylphenol.
123-63-7.....	Paraldehyde.
115-77-5.....	Pentaerythritol.
109-66-0.....	n-pentane.
109-67-1.....	1-pentene
127-18-4.....	Perchloroethylene.
594-42-3.....	Perchloromethyl mercaptan.
94-70-2.....	o-phenetidine.
156-43-4.....	p-phenetidine.
108-95-2.....	Phenol.
98-67-9, 585-38-6, 609-46-1, 1333-39-	Phenolsulfonic acids.
7 (c).	
91-40-7.....	Phenyl anthranilic acid.
(b).....	Phenylenediamine.
75-44-5.....	Phosgene.
85-44-9.....	Phthalic anhydride.
85-41-6.....	Phthalimide.
108-99-6.....	b-picoline.
110-85-0.....	Piperazine.
9003-29-6, 25036-29-7 (c)...	Polybutenes.
25322-68-3.....	Polyethylene glycol.
25322-69-4.....	Polypropylene glycol.
123-38-6.....	Propionaldehyde.
79-09-4.....	Propionic acid.
71-23-8.....	n-propyl alcohol.
107-10-8.....	Propylamine.
540-54-5.....	Propyl chloride.

**A. State and Federally Enforcable Section (continued)**

115-07-1.....	Propylene.
127-00-4.....	Propylene chlorohydrin.
78-87-5.....	Propylene dichloride.
57-55-6.....	Propylene glycol.
75-56-9.....	Propylene oxide.
110-86-1.....	Pyridine.
106-51-4.....	Quinone.
108-46-3.....	Resorcinol.
27138-57-4.....	Resorcylic acid.
69-72-7.....	Salicylic acid.
127-09-3.....	Sodium acetate.
532-32-1.....	Sodium benzoate.
9004-32-4.....	Sodium carboxymethyl cellulose.
3926-62-3.....	Sodium chloroacetate.
141-53-7.....	Sodium formate.
139-02-6.....	Sodium phenate.
110-44-1.....	Sorbic acid.
100-42-5.....	Styrene..
110-15-6.....	Succinic acid.
110-61-2.....	Succinonitrile.
121-57-3.....	Sulfanilic acid.
126-33-0.....	Sulfolane.
1401-55-4.....	Tannic acid.
100-21-0.....	Terephthalic acid.
79-34-5 (c).....	Tetrachloroethanes.
117-08-8.....	Tetrachlorophthalic anhydride.
78-00-2.....	Tetraethyl lead.
119-64-2.....	Tetrahydronaphthalene.
85-43-8.....	Tetrahydrophthalic anhydride.
75-74-1.....	Tetramethyl lead.
110-60-1.....	Tetramethylenediamine.
110-18-9.....	Tetramethylethylenediamine.
108-88-3.....	Toluene.
95-80-7.....	Toluene-2,4-diamine.
584-84-9.....	Toluene-2,4-diisocyanate.
26471-62-5.....	Toluene diisocyanates (mixture).
1333-07-9.....	Toluenesulfonamide.
104-15-4 (c).....	Toluenesulfonic acids.
98-59-9.....	Toluenesulfonyl chloride.
26915-12-8.....	Toluidines.
87-61-6, 108-70-3, 120-82-1 (c)....	Trichlorobenzenes.
71-55-6.....	1,1,1-trichloroethane.
79-00-5.....	1,1,2-trichloroethane.
79-01-6.....	Trichloroethylene.
75-69-4.....	Trichlorofluoromethane.
96-18-4.....	1,2,3-trichloropropane.
76-13-1.....	1,1,2-trichloro-1,2,2-trifluoroethane.
121-44-8.....	Triethylamine.

**A. State and Federally Enforcable Section (continued)**

112-27-6.....	Triethylene glycol.
112-49-2.....	Triethylene glycol dimethyl ether.
7756-94-7.....	Triisobutylene.
75-50-3.....	Trimethylamine.
57-13-6.....	Urea.
108-05-4.....	Vinyl acetate.
75-01-4.....	Vinyl chloride.
75-35-4.....	Vinylidene chloride.
25013-15-4.....	Vinyl toluene.
1330-20-7.....	Xylenes (mixed).
95-47-6.....	o-xylene.
106-42-3.....	p-xylene.
1300-71-6.....	Xylenol.
1300-73-8.....	Xylidine.

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<a> CAS numbers refer to the Chemical Abstracts Registry numbers assigned to specific chemicals, isomers, or mixtures of chemicals. Some isomers or mixtures that are covered by the standards do not have CAS numbers assigned to them. The standards apply to all of the chemicals listed, whether CAS numbers have been assigned or not.

<b> No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.

<c> CAS numbers for some of the isomers are listed; the standards apply to all of the isomers and mixtures, even if CAS numbers have not been assigned.

[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000]

**B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

- B001 Boiler #1
- B002 Boiler #2
- Z001 Miscellaneous Natural Gas Combustion Sources
- Z002 Printer #1
- Z003 KL-1 Distillate Fuel Oil Tank
- Z004 Calender #7
- Z005 KL-2 Toluene Tank
- Z006 KL-3 Ethanol Tank
- Z007 KL-4 Recovered Ethanol Tank
- Z008 KL-5 Recovered Toluene Tank
- Z009 Printer #2
- Z010 Laboratory Hoods and Ovens

Each insignificant emissions unit at this facility must comply with all applicable State and Federal regulations, as well as any emission limitation and/or control requirements contained within a Permit to Install for the emissions unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mixer #1 (P001)  
**Activity Description:** Mixer for production of mash

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
littleford mixer #1, hammermill and associated dry raw material handling equipment w/fabric filter and solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	0.17 lb particulate emissions (PE)/hr  21.24 lbs organic compounds (OC)/day  See A.I.2.a and b.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).  Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.

## **2. Additional Terms and Conditions (continued)**

- 2.b** The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

## **II. Operational Restrictions**

1. The OC content of the gasket mash produced by this emissions unit shall not exceed 45%, by weight, per batch.
2. The pressure drop across the baghouse shall be maintained within the range of 0.8 to 3.5 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records that list the following information for this emissions unit:
  - a. The company identification of the materials being mixed in each batch.
  - b. The amount, in pounds, of the materials being mixed in each batch.
  - c. The OC content, in percent, by weight, of the materials being mixed.
2. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
  - d. All exceedances of the OC content limitation of 45%, by weight.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Section A.II.2. of these terms and conditions.
3. If no deviations (excursions) occurred during a reporting period, then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
0.17 lb PE/hr

Applicable Compliance Method:

To determine the actual worst case emissions rate for PE, the following equation may be used:

$$E = (\text{MASPH}) \times (\text{PE}) \times (\text{CE})$$

where,

$$E = \text{PE rate (lbs/hr)}$$

MASPH = maximum amount of solids per batch per hour (1,778 lbs/hr)

PE= uncontrolled PE [assume 1% loss (0.01)]\*

CE= control efficiency of the baghouse [assume 99% control efficiency (1-.99)]

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

\*based upon engineering estimate

- 1.b Emission Limitation-  
Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule.

Applicable Compliance Method-

If required, the permittee shall demonstrate compliance with the visible PE above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation:  
21.24 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = Mp \times Moc \times 1\% \times (1 - Cf) \times 24$$

where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum OC content, in percent by weight

Cf = the overall capture and control efficiency

- 1.d** Emission Limitations:  
58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Calender #1 (P002)

**Activity Description:** Rubber bonded compressed gasket sheet manufacturing process

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calender #1 Troester calender w/solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	722.7 lbs organic compounds (OC)/day
	OAC rule 3745-21-07(G)(2)	See A.I.2.a and b. The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.c Emission Limitation:  
722.7 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp \times Moc) - (Mp \times Moc \times 0.3\%) ] \times (1 - Cf) \} \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.d** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.e** Emission Limitation-

minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.f** Emission Limitation-

OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Calender #2 (P003)  
**Activity Description:** Rubber bonded compressed gasket sheet manufacturing process

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calender #2 Troester calender w/solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	722.7 lbs organic compounds (OC)/day
	OAC rule 3745-21-07(G)(2)	See A.I.2.a and b. The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

**II. Operational Restrictions**

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.c Emission Limitation:  
722.7 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp \times Moc) - (Mp \times Moc \times 0.3\%) ] \times (1 - Cf) \} \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.d** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Calender #3 (P004)

**Activity Description:** Rubber bonded compressed gasket sheet manufacturing process

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calender #3 Troester calender w/solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	722.7 lbs organic compounds (OC)/day
	OAC rule 3745-21-07(G)(2)	See A.I.2.a and b. The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

**II. Operational Restrictions**

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.c Emission Limitation:  
722.7 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp \times Moc) - (Mp \times Moc \times 0.3\%) ] \times (1 - Cf) \} \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

## **V. Testing Requirements (continued)**

**1.d** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Calender #4 (P005)  
**Activity Description:** Rubber bonded compressed gasket sheet manufacturing process

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calender #4 Troester calender w/solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	722.7 lbs organic compounds (OC)/day
	OAC rule 3745-21-07(G)(2)	See A.I.2.a and b. The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

**II. Operational Restrictions**

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.c Emission Limitation:  
722.7 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp \times Moc) - (Mp \times Moc \times 0.3\%) ] \times (1 - Cf) \} \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

## **V. Testing Requirements (continued)**

**1.d** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mixer #3 (P008)  
**Activity Description:** Mixer for production of mash

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
littleford mixer #3, hammermill and associated dry raw material handling equipment w/fabric filter and solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	0.17 lb particulate emissions (PE)/hr  21.24 lbs organic compounds (OC)/day  See A.I.2.a and b.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).  Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.

## **2. Additional Terms and Conditions (continued)**

- 2.b** The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

## **II. Operational Restrictions**

1. The OC content of the gasket mash produced by this emissions unit shall not exceed 45%, by weight, per batch.
2. The pressure drop across the baghouse shall be maintained within the range of 0.8 to 3.5 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records that list the following information for this emissions unit:
  - a. The company identification of the materials being mixed in each batch.
  - b. The amount, in pounds, of the materials being mixed in each batch.
  - c. The OC content, in percent, by weight, of the materials being mixed.
2. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
  - d. All exceedances of the OC content limitation of 45%, by weight.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Section A.II.2. of these terms and conditions.
3. If no deviations (excursions) occurred during a reporting period, then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
0.17 lb PE/hr

Applicable Compliance Method:

To determine the actual worst case emissions rate for PE, the following equation may be used:

$$E = (\text{MASPH}) \times (\text{PE}) \times (\text{CE})$$

where,

$$E = \text{PE rate (lbs/hr)}$$

MASPH = maximum amount of solids per batch per hour (1,778 lbs/hr)

PE= uncontrolled PE [assume 1% loss (0.01)]\*

CE= control efficiency of the baghouse [assume 99% control efficiency (1-.99)]

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

\*based upon engineering estimate

- 1.b Emission Limitation-  
Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule.

Applicable Compliance Method-

If required, the permittee shall demonstrate compliance with the visible PE above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation:  
21.24 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = Mp \times Moc \times 1\% \times (1 - Cf) \times 24$$

where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum OC content, in percent by weight

Cf = the overall capture and control efficiency

- 1.d** Emission Limitations:  
58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Mixer #4 (P009)  
**Activity Description:** Mixer for production of mash

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
littleford mixer #4, hammermill and associated dry raw material handling equipment w/fabric filter and solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	0.17 lb particulate emissions (PE)/hr  21.24 lbs organic compounds (OC)/day  See A.I.2.a and b.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).  Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.

## **2. Additional Terms and Conditions (continued)**

- 2.b** The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

## **II. Operational Restrictions**

1. The OC content of the gasket mash produced by this emissions unit shall not exceed 45%, by weight, per batch.
2. The pressure drop across the baghouse shall be maintained within the range of 0.8 to 3.5 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records that list the following information for this emissions unit:
  - a. The company identification of the materials being mixed in each batch.
  - b. The amount, in pounds, of the materials being mixed in each batch.
  - c. The OC content, in percent, by weight, of the materials being mixed.
2. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
  - d. All exceedances of the OC content limitation of 45%, by weight.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Section A.II.2. of these terms and conditions.
3. If no deviations (excursions) occurred during a reporting period, then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
0.17 lb PE/hr

Applicable Compliance Method:

To determine the actual worst case emissions rate for PE, the following equation may be used:

$$E = (\text{MASPH}) \times (\text{PE}) \times (\text{CE})$$

where,

$$E = \text{PE rate (lbs/hr)}$$

MASPH = maximum amount of solids per batch per hour (1,778 lbs/hr)

PE= uncontrolled PE [assume 1% loss (0.01)]\*

CE= control efficiency of the baghouse [assume 99% control efficiency (1-.99)]

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

\*based upon engineering estimate

- 1.b Emission Limitation-  
Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule.

Applicable Compliance Method-

If required, the permittee shall demonstrate compliance with the visible PE above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation:  
21.24 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = Mp \times Moc \times 1\% \times (1 - Cf) \times 24$$

where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum OC content, in percent by weight

Cf = the overall capture and control efficiency

- 1.d** Emission Limitations:  
58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Mixer #2 (P011)  
**Activity Description:** Mixer for production of mash

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
littleford mixer #2, hammermill and associated dry raw material handling equipment w/fabric filter and solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	0.17 lb particulate emissions (PE)/hr  21.24 lbs organic compounds (OC)/day  See A.I.2.a and b.
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).  Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.

## **2. Additional Terms and Conditions (continued)**

- 2.b** The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

## **II. Operational Restrictions**

1. The OC content of the gasket mash produced by this emissions unit shall not exceed 45%, by weight, per batch.
2. The pressure drop across the baghouse shall be maintained within the range of 0.8 to 3.5 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records that list the following information for this emissions unit:
  - a. The company identification of the materials being mixed in each batch.
  - b. The amount, in pounds, of the materials being mixed in each batch.
  - c. The OC content, in percent, by weight, of the materials being mixed.
2. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
  - d. All exceedances of the OC content limitation of 45%, by weight.

#### IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Section A.II.2. of these terms and conditions.
3. If no deviations (excursions) occurred during a reporting period, then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:  
0.17 lb PE/hr

Applicable Compliance Method:

To determine the actual worst case emissions rate for PE, the following equation may be used:

$$E = (\text{MASPH}) \times (\text{PE}) \times (\text{CE})$$

where,

$$E = \text{PE rate (lbs/hr)}$$

MASPH = maximum amount of solids per batch per hour (1,778 lbs/hr)

PE= uncontrolled PE [assume 1% loss (0.01)]\*

CE= control efficiency of the baghouse [assume 99% control efficiency (1-.99)]

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

\*based upon engineering estimate

- 1.b Emission Limitation-  
Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule.

Applicable Compliance Method-

If required, the permittee shall demonstrate compliance with the visible PE above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation:  
21.24 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = Mp \times Moc \times 1\% \times (1 - Cf) \times 24$$

where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum OC content, in percent by weight

Cf = the overall capture and control efficiency

- 1.d** Emission Limitations:  
58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.e** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.f** Emission Limitation-  
OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Ethanol Distillation (P013)

**Activity Description:** Continuous distillation ethanol solvent recovery system. Thermoseal has requested OEPA to delete this equipment as an emission unit and amend PTI # 05-8246 accordingly in correspondence dated October 6, 1999 and July 7, 2000. This equipment will remain in STARShip program until OEPA formally amends the PTI

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
ethanol distillation w/bubble cap distillation tower, two condensers, and associated piping/equipment.	OAC rule 3745-31-05(A)(3) PTI #05-8246	19.1 lbs organic compounds (OC)/day  See A.I.2.b and c.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(DD).
	OAC rule 3745-21-09(DD)	exempt, pursuant to OC rule 3745-21-09(DD)(17)(a)(i) (See A.I.2.a.)

##### 2. Additional Terms and Conditions

- 2.a** This emissions unit has a design production capacity of less than 1,100 tons of material per year.
- 2.b** The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.c** The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

##### II. Operational Restrictions

1. The amount of liquid organic material processed in this emissions unit shall not exceed 1,000 tons per rolling, 365-day period.

### **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain daily records that list the following information for this emissions unit:
  - a. The company identification of each liquid organic material processed.
  - b. The amount of each liquid organic material processed, in tons.
  - c. The amount of all the liquid organic materials processed (summation of b for all liquid organic materials), in tons.
  - d. The rolling, 365-day amount of liquid organic materials processed, in tons .
2. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated organic compound emissions, in tons.
  - b. The rolling, 365-day summation of the calculated organic compound emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the organic compound emissions.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
  - d. All exceedances of the rolling, 365-day amount of liquid organic compounds processed of 1,000 tons.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.
4. The permittee shall submit annual reports that summarize the actual annual amount of liquid organic material processed in this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 1.a** Emission Limitation:  
19.1 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = [ ( Mp/2000 \times 3.3 ) + ( Mp/2000 \times 0.00024 ) ] \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

- 1.b** Emission Limitations:  
58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.c** Emission Limitation-  
minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

- 1.d** Operational Restriction-  
1000 tons of liquid organic materials/rolling, 365-day period

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the operational restriction above in accordance with the record keeping requirements specified in Section A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Calender #5 (P015)

**Activity Description:** Rubber bonded compressed gasket sheet manufacturing process (Formerly Source P010)

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calender #5 Troester calender w/solvent capture and recovery system	OAC rule 3745-31-05(A)(3) PTI #05-8246	722.7 lbs organic compounds (OC)/day
	OAC rule 3745-21-07(G)(2)	See A.I.2.a and b. The control requirements specified by this rule are less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

**II. Operational Restrictions**

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.c Emission Limitation:  
722.7 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp \times Moc) - (Mp \times Moc \times 0.3\%) ] \times (1 - Cf) \} \times 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.d** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.e** Emission Limitation-

minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 and 2 of this permit.

**1.f** Emission Limitation-

OC content not to exceed 45%, by weight

Applicable Compliance Methods-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Lurgi Toluene Decantering (P016)

**Activity Description:** Lurgi Toluene Decanter System. Thermoseal has requested OEPA to delete this equipment as an emission unit and amend PTI # 05-8246 accordingly in correspondence dated October 6, 1999 and July 7, 2000. This equipment will remain in STARShip program until OEPA formally amends the PTI.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Lurgi toluene decanting w/two condensers, decanter tank and associated piping/equipment	OAC rule 3745-31-05(A)(3) PTI #05-8246	2.9 lbs of organic compound (OC ) emissions/day  See A.I.2.a and b.
	40 CFR, Part 60, Subpart V V	See Part II of this permit. See A.I.2.c.
	OAC rule 3745-21-09(DD)	The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR, Part 60, Supart VV.

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

- 2.c The permittee shall develop and implement a leak detection and repair program which will comply with the requirements of 40 CFR, Part 60, Subpart VV.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
2.9 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp/2000 * 3.3) + (Mp/2000 * 0.00024) ] * ( 1-Cf ) \} * 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.b** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**1.c** Emission Limitation-

minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Croftshaw Toluene Decantering (P017)

**Activity Description:** Croftshaw Toluene Decanter System. Thermoseal has requested OEPA to delete this equipment as an emission unit and amend PTI # 05-8246 accordingly in correspondence dated October 6, 1999 and July 7, 2000. This equipment will remain in STARShip program until OEPA formally amends the PTI

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Croftshaw toluene decanting w/two condensers, decanter tank and associated piping/equipment	OAC rule 3745-31-05(A)(3) PTI #05-8246	2.9 lbs of organic compound (OC ) emissions/day  See A.I.2.a and b.
	40 CFR, Part 60, Subpart V V	See Part II of this permit. See A.I.2.c.
	OAC rule 3745-21-09(DD)	The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR, Part 60, Supart VV.

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

- 2.c The permittee shall develop and implement a leak detection and repair program which will comply with the requirements of 40 CFR, Part 60, Subpart VV.

#### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
2.9 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp/2000 * 3.3) + (Mp/2000 * 0.00024) ] * ( 1-Cf ) \} * 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.b** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**1.c** Emission Limitation-

minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Vulcan Toluene Decantering (P018)

**Activity Description:** Vulcan Toluene Decanter System. Thermoseal has requested OEPA to delete this equipment as an emission unit and amend PTI # 05-8246 accordingly in correspondence dated October 6, 1999 and July 7, 2000. This equipment will remain in STARShip program until OEPA formally amends the PTI.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Vulcan toluene decanting w/two condensers, decanter tank and associated piping/equipment	OAC rule 3745-31-05(A)(3) PTI #05-8246	2.9 lbs of organic compound (OC ) emissions/day  See A.I.2.a and b.
	40 CFR, Part 60, Subpart V V	See Part II of this permit. See A.I.2.c.
	OAC rule 3745-21-09(DD)	The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR, Part 60, Supart VV.

##### 2. Additional Terms and Conditions

- 2.a The OC emissions (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) shall not exceed 58.3 tons per rolling, 30-day period and 180 tons per rolling, 365-day period.
- 2.b The emissions unit shall be equipped with a solvent capture and recovery system that is capable of reducing the overall OC emissions by at least 90.6%, by weight, based on a 30-day rolling period.

In order to assure compliance, the permittee shall maintain records that demonstrate compliance with the maintenance and monitoring standards as established in the April 3, 1998 mass balance protocol agreement between the Ohio Environmental Protection Agency and the permittee.

- 2.c The permittee shall develop and implement a leak detection and repair program which will comply with the requirements of 40 CFR, Part 60, Subpart VV.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined) in accordance with the established requirements of the April 3, 1998 mass balance protocol agreements between the Ohio EPA and the permittee:
  - a. The rolling, 30-day summation of the calculated OC emissions, in tons.
  - b. The rolling, 365-day summation of the calculated OC emissions, in tons.
  - c. The rolling, 30-day average of the calculated overall capture and control efficiency of the solvents recovery system for the OC emissions.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. All exceedances of the rolling, 365-day OC emission limitation of 180 tons.
  - b. All exceedances of the rolling, 30-day OC emission limitation of 58.3 tons.
  - c. All records showing that the restriction on the rolling, 30-day average overall capture and control efficiency of the solvent recovery system was below the required 90.6%, by weight, for OCs.
2. If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the actual annual OC emissions for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined, for the previous calendar year. The reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
2.9 lbs OC/day

Applicable Compliance Method:

The daily allowable OC emission limitation was established as follows:

$$Ed = \{ [ ( Mp/2000 * 3.3) + (Mp/2000 * 0.00024) ] * ( 1-Cf ) \} * 24$$

Where:

Ed = daily OC emissions (lbs/day)

Mp = maximum hourly capacity, in pounds

Moc = maximum organic compound content, in percent by weight

Cf = the overall capture and control efficiency

**V. Testing Requirements (continued)**

**1.b** Emission Limitations:

58.3 tons OC/rolling, 30-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

180 tons OC/rolling, 365-day period (for emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P016, P017 and P018, combined)

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**1.c** Emission Limitation-

minimum overall control efficiency of 90.6% of OC, by weight

Applicable Compliance Methods-

The permittee shall demonstrate compliance with the control requirements above in accordance with the record keeping requirements specified in Sections A.III.1 of this permit.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Sealex Manufacturing (P019)

**Activity Description:** Sealex manufacturing consisting of solvent dispensers, mixing drums, tumbling machine, extruder, and solvent extraction oven.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Sealex manufacturing consisting of solvent dispensers, mixing drums, tumbling machine, extruders, solvent extraction oven, stretching machine, sintering oven, spool packaging and winding equipment.	OAC rule 3745-31-05(A)(3) PTI #05-9646	5 lbs organic compounds (OC)/hour  7.3 tons OC/yr
	OAC rule 3745-21-07(G)(2)	40 lbs OC/day  The hourly OC emission limitation specified by this rule is less stringent than the hourly OC emission limitation established pursuant to OAC rule 3745-31-05(A).

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and record the following information for each day for this emissions unit:
  - a. The company identification for each material employed.
  - b. Documentation on whether or not each material employed is a photochemically reactive material, as defined in OAC rule 3745-21-05(C).
  - c. The number of gallons of each material employed.
  - d. The OC content of each material employed, in pounds per gallon.
  - e. The total OC emissions for all the materials employed (summation of (c x d) for all materials), in pounds;
  - f. For the days during which any photochemically reactive material is employed, the total OC emissions for all the materials employed, in pounds.
  - g. For the days during which any photochemically reactive material is employed, the total number of hours the emissions unit was in operation.
  - h. For the days during which any photochemically reactive material is employed, the average hourly OC emission rate for all the materials employed (f/g), in pounds (average).

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. An identification of each hour during which the average hourly organic compound emissions from this emissions unit exceeded 5 pounds per hour, and the actual organic compound emissions for each such hour.
  - b. An identification of each day during which the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

If no deviations (excursions) occurred during a reporting period then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the local air agency) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.
2. The permittee shall submit annual reports that summarize the total actual organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**1.a** Emission Limitations:

8.0 lbs OC/hr and 40.0 lbs OC/day

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit.

**V. Testing Requirements (continued)**

**1.b** Emission Limitation:

7.3 tons OC/year

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1 of this permit and shall be the summation for the daily OC emission rates for the calendar year.

- 2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the materials.

**VI. Miscellaneous Requirements**

- 1.** None

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

## VI. Miscellaneous Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Trimethylbenz

TLV (ug/m3): 25

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 1360.0

MAGLC (ug/m3): 2920.3

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than

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