



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
SHELBY COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 05-14280**

**Fac ID: 0575010161**

**DATE: 3/14/2006**

Thermoseal Inc  
Robert Leighty  
2350 Campbell Rd  
Sidney, OH 453659501

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

SWDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 3/14/2006  
Effective Date: 3/14/2006**

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**FINAL PERMIT TO INSTALL 05-14280**

Application Number: 05-14280  
Facility ID: 0575010161  
Permit Fee: **\$7000**  
Name of Facility: Thermosteal Inc  
Person to Contact: Robert Leighty  
Address: 2350 Campbell Rd  
Sidney, OH 453659501

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2350 Campbell Rd  
Sidney, Ohio**

Description of proposed emissions unit(s):  
**Modification of Daily limit due to change in worst case mixture.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping 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.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

## 3. Risk Management Plans

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

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#### 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.

#### 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.

#### 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 re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be

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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.

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## 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

## 8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

## 9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - 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 ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

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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.

## 10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

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**11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**12. 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.

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### **13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

## **B. State Only Enforceable Permit-To-Install General Terms and Conditions**

### **1. Compliance Requirements**

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

### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### **3. Permit Transfers**

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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.

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#### **4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

#### **5. Construction of New Sources(s)**

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **6. Public Disclosure**

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

#### **7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

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**8. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install.

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The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. 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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit-To-Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	180
PM/PM10	0.82

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**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 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>
P001 - Mixer 1	3745-31-05(A)(3)	2.1 lbs of organic compound (OC) per day;  0.5 lb of particulate/PM <sub>10</sub> per day and 0.09 tons per year.  The combined OC emissions from the (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period.
		Use of a solvent recovery and filter systems to minimize organic emissions and combined usage and emission limitations.
	3745-21-07(G)(2)	See A.2.b.  The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
	3745-17-11(B)(1)	The emissions limitation specified by

this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## **II. Operational Restrictions**

- 1.a** This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the mixing operations that has a design control efficiency of at least 99 %, and the filter system shall be maintained in accordance within design specification and good engineering practices.
- 1.b** The OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, and P020, shall not exceed 50% by weight, per batch.
- 1.c** The pressure drop across the baghouse shall be maintained within the range of 0.2 to 3.5 inches of water while the emissions unit is in operation.

## **III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
  - 1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  - 2. The calculated organic compound emissions, in tons emitted per the last 365-days; and

3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b The permittee shall maintain daily records that list the following information on the materials mixed in the emissions units P001, P011, P008, P009 and P020:
  - a. The company identification of the materials being mixed, in each batch;
  - b. The amount of material mixed, in each batch, in pounds; and
  - c. The OC content of the materials being mixed, in percent by weight, in each batch.
- 1.c 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 a daily basis when the emissions unit is in operation.

#### **IV. Reporting Requirements**

- 1.a 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 daily records that show the OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, P020, exceeds 50% by weight,

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per batch; and

- 1.b** 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.1.c. of these terms and conditions.
  
- 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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## V. Testing Requirements

- 1.a** Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_h = [(MASPH) \times UVOC \times (1-CE) \times 24]$$

where:

$E_h$  = allowable emission rate (lbs/hr)

MASPH = maximum amount of material per batch per hour (2092 lbs/batch/hr)

UVOC = uncontrolled VOC [assume  $4.44 \times 10^{-4}$  lbs VOC/lb of rubber]\*

CE = control efficiency ( 0.906)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

- 1.b** Compliance with the daily PM/PM10 compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_d = [((MASPH) \times UPE) \times (1-CE)) \times 24]$$

where,

$E_d$  = allowable emission rate (PM/PM10 lbs/day)

MASPH = maximum amount of material per batch per hour (2,092 lbs/batch/hr)

UPE = uncontrolled PE [assume  $9.25 \times 10^{-4}$  lbs/lb of rubber]\*

CE = control efficiency (99%)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions units.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## **VI. Miscellaneous Requirements**

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
P001 - Mixer 1	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 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>
P002 - Calender 1	3745-31-05(A)(3)	803 lbs of organic compound (OC) per day;  The combined emissions from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period  Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations.  See A.2.b.
	3745-21-07(G)(2)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The overall emissions of organic compound (OC) from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.

- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## **II. Operational Restrictions**

- 1.** The OC content of the gasket mash utilized by this emissions unit shall not exceed 50%, by weight, per batch.

## **III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
- 1.** The calculated organic compound emissions, in tons emitted per the last 30-days;
  - 2.** The calculated organic compound emissions, in tons emitted per the last 365-days; and
  - c.** The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** Because of quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the records required for the mixing process shall suffice to demonstrate compliance with the 50% organic content requirement for the calenders.

## **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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

For Calenders:

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

Where:

Ed= daily organic compound emissions

Mp= maximum hourly capacity, in pounds

Moc= maximum organic compound content, in percent by weight

Cf= the overall capture and control efficiency

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## VI. Miscellaneous Requirements

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender

#3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
P002 - Calender 1	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

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Emissions Unit ID: P002

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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Issued: 3/14/2006

Emissions Unit ID: P003

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P003 - Calender 2	3745-31-05(A)(3)	803 lbs of organic compound (OC) per day;
		The combined emissions from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period
		Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations.
		See A.2.b.
	3745-21-07(G)(2)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## **II. Operational Restrictions**

- 1.a** The OC content of the gasket mash utilized by this emissions unit shall not exceed 50%, by weight, per batch.

## **III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
  - a. The calculated organic compound emissions, in tons emitted per the last 30-days;
  - b. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  - c. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** Because of quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the records required for the mixing process shall suffice to demonstrate compliance with the 50% organic content requirement for the calenders.

## **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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

For Calenders:

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

Where:

Ed= daily organic compound emissions

Mp= maximum hourly capacity, in pounds

Moc= maximum organic compound content, in percent by weight

Cf= the overall capture and control efficiency

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions units.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## VI. Miscellaneous Requirements

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008

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(mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

## B. State Only Enforceable Section

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

1. The specific operations(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 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>
P003 - Calender 2	None	None

### 2. Additional Terms and Conditions

2.a None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

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Emissions Unit ID: P003

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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PTI A

Issued: 3/14/2006

Emissions Unit ID: P004

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P004 - Calender 3	3745-31-05(A)(3)	<p>803 lbs of organic compound (OC) per day;</p> <p>The combined emissions from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period</p> <p>Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations.</p> <p>See A.2.b.</p>
	3745-21-07(G)(2)	<p>The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

**2. Additional Terms and Conditions**

Emissions Unit ID: P004

- 2.a** The overall emissions of organic compound (OC) from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## II. Operational Restrictions

- 1.a** The OC content of the gasket mash utilized by this emissions unit shall not exceed 50%, by weight, per batch.

## III. Monitoring and/or Recordkeeping Requirements

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  2. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** Because of quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the records required for the mixing process shall suffice to demonstrate compliance with the 50% organic content requirement for the calenders.

## 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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## **V. Testing Requirements**

- 1.a Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

For Calenders:

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

Where:

Ed= daily organic compound emissions

Mp= maximum hourly capacity, in pounds

Moc= maximum organic compound content, in percent by weight

Cf= the overall capture and control efficiency

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## **VI. Miscellaneous Requirements**

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008

Emissions Unit ID: P004

(mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
P004 - Calender 3	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

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Emissions Unit ID: P004

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P005 - Calender 4	3745-31-05(A)(3)	<p>803 lbs of organic compound (OC) per day;</p> <p>The combined emissions from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period</p> <p>Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations.</p> <p>See A.2.b.</p> <p>The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
	3745-21-07(G)(2)	

**2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## **II. Operational Restrictions**

- 1.** The OC content of the gasket mash utilized by this emissions unit shall not exceed 50%, by weight, per batch.

## **III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
  - 1.** The calculated organic compound emissions, in tons emitted per the last 30-days;
  - 2.** The calculated organic compound emissions, in tons emitted per the last 365-days; and
  - 1.** The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** Because of quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the records required for the mixing process shall suffice to demonstrate compliance with the 50% organic content requirement for the calenders.

## **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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

For Calenders:

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

Where:

Ed= daily organic compound emissions

Mp= maximum hourly capacity, in pounds

Moc= maximum organic compound content, in percent by weight

Cf= the overall capture and control efficiency

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## VI. Miscellaneous Requirements

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011

(mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
P005 - Calender 4	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

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Emissions Unit ID: P005

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None



**Thermoseal Inc**  
**PTI Application: 05-11290**  
**Issue**

**Facility ID: 0575010161**

Emissions Unit ID: P008

Applicable Emissions  
Limitations/Control  
Measures

2.1 lbs of organic compound (OC) per day;

0.5 lb of particulate/PM<sub>10</sub> per day and 0.09 tons per year.

The combined OC emissions from the (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period.

Use of a solvent recovery and filter systems to minimize organic emissions and combined usage and emission limitations.

See A.2.b.

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

**II. Operational Restrictions**

- 1.a** This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the mixing operations that has a design control efficiency of at least 99 %, and the filter system shall be maintained in accordance within design specification and good engineering practices.
- 1.b** The OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, and P020, shall not exceed 50% by weight, per batch.
- 1.c** The pressure drop across the baghouse shall be maintained within the range of 0.2 to 3.5 inches of water while the emissions unit is in operation.

**III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  2. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** The permittee shall maintain daily records that list the following information on the materials mixed in the emissions units P001, P011, P008, P009 and P020:
- a. The company identification of the materials being mixed, in each batch;
  - b. The amount of material mixed, in each batch, in pounds; and
  - c. The OC content of the materials being mixed, in percent by weight, in each batch.
- 1.c** 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 a daily basis when the emissions unit is in operation.

#### **IV. Reporting Requirements**

- 1.a** 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 daily records that show the OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, P020, exceeds 50% by weight, per batch; and
- 1.b** 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.1.c.](#) of these terms and conditions.

**Thermoseal Inc**  
**PTI Application: 05-11280**  
**Issue**

**Facility ID: 0575010161**

Emissions Unit ID: P008

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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## V. Testing Requirements

- 1.a** Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_h = [(MASPH) \times UVOC \times (1-CE) \times 24]$$

where:

$E_h$  = allowable emission rate (lbs/hr)

MASPH = maximum amount of material per batch per hour (2092 lbs/batch/hr)

UVOC = uncontrolled VOC [assume  $4.44 \times 10^{-4}$  lbs VOC/lb of rubber]\*

CE = control efficiency ( 0.906)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

- 1.b** Compliance with the daily PM/PM10 compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_d = [((MASPH) \times UPE) \times (1-CE)) \times 24]$$

where,

$E_d$  = allowable emission rate

MASPH = maximum amount of material per batch per hour (2,092 lbs/batch/hr)

UPE = uncontrolled PE [assume  $9.25 \times 10^{-4}$  lbs/lb of rubber]\*

CE = control efficiency (99%)

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Emissions Unit ID: P008

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## **VI. Miscellaneous Requirements**

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
P008 - Mixer 3	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P009 - Mixer 4	3745-31-05(A)(3)
	3745-17-11(B)(1)
	3745-21-07(G)(2)

Applicable Emissions  
Limitations/Control  
Measures

2.1 lbs of organic compound (OC) per day;

0.5 lb of particulate/PM<sub>10</sub> per day and 0.09 tons per year.

The combined OC emissions from the (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period.

Use of a solvent recovery and filter systems to minimize organic emissions and combined usage and emission limitations.

See A.2.b.

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitation

specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** The overall emissions of organic compound (OC) from the emissions units (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## II. Operational Restrictions

- 1.a** This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the mixing operations that has a design control efficiency of at least 99 %, and the filter system shall be maintained in accordance within design specification and good engineering practices.
- 1.b** The OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, and P020, shall not exceed 50% by weight, per batch.
- 1.c** The pressure drop across the baghouse shall be maintained within the range of 0.2 to 3.5 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Recordkeeping Requirements

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  2. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** The permittee shall maintain daily records that list the following information on the materials mixed in the emissions units P001, P011, P008, P009 and P020:
- a. The company identification of the materials being mixed, in each batch;
  - b. The amount of material mixed, in each batch, in pounds; and
  - c. The OC content of the materials being mixed, in percent by weight, in each batch.
- 1.c** 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 a daily basis when the emissions unit is in operation.

#### **IV. Reporting Requirements**

- 1.a** 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 daily records that show the OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, P020, exceeds 50% by weight, per batch; and
- 1.b** 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.1.c. of these terms and conditions.

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**Issue**

**Facility ID: 0575010161**

Emissions Unit ID: P009

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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## **V. Testing Requirements**

- 1.a** Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_h = [(MASPH) \times UVOC \times (1-CE) \times 24]$$

where:

$E_h$  = allowable emission rate (lbs/hr)

MASPH = maximum amount of material per batch per hour (2092 lbs/batch/hr)

UVOC = uncontrolled VOC [assume  $4.44 \times 10^{-4}$  lbs VOC/lb of rubber]\*

CE = control efficiency ( 0.906)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

- 1.b** Compliance with the daily PM/PM10 compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_d = [((MASPH) \times UPE) \times (1-CE)) \times 24]$$

where,

$E_d$  = allowable emission rate

MASPH = maximum amount of material per batch per hour (2,092 lbs/batch/hr)

UPE = uncontrolled PE [assume  $9.25 \times 10^{-4}$  lbs/lb of rubber]\*

CE = control efficiency (99%)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## **VI. Miscellaneous Requirements**

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

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Issued: 3/14/2006

Emissions Unit ID: P009

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P009 - Mixer 4	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, <u>and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P011 - Mixer 2	3745-31-05(A)(3)	3745-17-11(B)(1)
	3745-21-07(G)(2)	

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**Issued: 3/14/2006**

Emissions Unit ID: P011

Applicable Emissions  
Limitations/Control  
Measures

2.1 lbs of organic compound (OC) per day;

0.5 lb of particulate/PM<sub>10</sub> per day and 0.09 tons per year.

The combined OC emissions from the (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period.

Use of a solvent recovery and filter systems to minimize organic emissions and combined usage and emission limitations.

See A.2.b.

The emissions limitation specified by this rule is less stringent than the emissions limitation

established pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

**II. Operational Restrictions**

- 1.a** This emission unit shall be equipped with a filter system that reduces the overall particulate emissions from the mixing operations that has a design control efficiency of at least 99 %, and the filter system shall be maintained in accordance within design specification and good engineering practices.
- 1.b** The OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, and P020, shall not exceed 50% by weight, per batch.
- 1.c** The pressure drop across the baghouse shall be maintained within the range of 0.2 to 3.5 inches of water while the emissions unit is in operation.

**III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  2. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** The permittee shall maintain daily records that list the following information on the materials mixed in the emissions units P001, P011, P008, P009 and P020:
- a. The company identification of the materials being mixed, in each batch;
  - b. The amount of material mixed, in each batch, in pounds; and
  - c. The OC content of the materials being mixed, in percent by weight, in each batch.
- 1.c** 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 a daily basis when the emissions unit is in operation.

#### **IV. Reporting Requirements**

- 1.a** 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 daily records that show the OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, P020, exceeds 50% by weight, per batch; and
- 1.b** 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.1c. of these terms and conditions.

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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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## **V. Testing Requirements**

- 1.a** Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_h = [(MASPH) \times UVOC \times (1-CE) \times 24]$$

where:

$E_h$  = allowable emission rate (lbs/hr)

MASPH = maximum amount of material per batch per hour (2092 lbs/batch/hr)

UVOC = uncontrolled VOC [assume  $4.44 \times 10^{-4}$  lbs VOC/lb of rubber]\*

CE = control efficiency ( 0.906)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

- 1.b** Compliance with the daily PM/PM10 compound emission limitations for this emissions unit shall be determined based on the following equations:

$$E_d = [((MASPH) \times UPE) \times (1-CE)) \times 24]$$

where,

$E_d$  = allowable emission rate

MASPH = maximum amount of material per batch per hour (2,092 lbs/batch/hr)

UPE = uncontrolled PE [assume  $9.25 \times 10^{-4}$  lbs/lb of rubber]\*

CE = control efficiency (99%)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

## **VI. Miscellaneous Requirements**

1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

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**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
P011 - Mixer 2	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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PTI A

Issued: 3/14/2006

Emissions Unit ID: P015

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P015 - Calender 5	3745-31-05(A)(3)	803 lbs of organic compound (OC) per day;
		The combined emissions from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period
		Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations.
	3745-21-07(G)(2)	See A.2.b.
		The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The overall emissions of organic compound (OC) from the emissions units ( P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period.

## **II. Operational Restrictions**

- 1.a** The OC content of the gasket mash utilized by this emissions unit shall not exceed 50%, by weight, per batch.

## **III. Monitoring and/or Recordkeeping Requirements**

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
  - 1. The calculated organic compound emissions, in tons emitted per the last 30-days;
  - 2. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  - 3. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** Because of quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the records required for the mixing process shall suffice to demonstrate compliance with the 50% organic content requirement for the calenders.

## **IV. Reporting Requirements**

- 1.a** 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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## **V. Testing Requirements**

- 1.a Compliance with the daily organic compound emission limitations for this emissions unit shall be determined based on the following equations:

For Calenders:

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

Where:

Ed= daily organic compound emissions

Mp= maximum hourly capacity, in pounds

Moc= maximum organic compound content, in percent by weight

Cf= the overall capture and control efficiency

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

2. Compliance with the requirements of condition "1.a." under "Monitoring and/or Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

**VI. Miscellaneous Requirements**

- 1. The requirements of this Permit to Install will supercede the requirements of PTI 05-08246 for only the following emission units: P001 (mixer #1), P011 (mixer #2), P008 (mixer # 3), P009 (mixer #4), P002 (calender #1), P003 (calender #2), P004 (calender #3), P005 (calender # 4), and P015 (calender # 5).

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
P015 - Calender 5	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

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None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None



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**Issued: 3/14/2006**

Emissions Unit ID: P020

Applicable Emissions  
Limitations/Control  
Measures

6.2 lbs of organic compound (OC) per day;

2.5 lb of particulate/PM<sub>10</sub> per day and 0.46 tons per year.

The combined OC emissions from the (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period, and 180 tons per rolling 365 day period.

Use of a solvent recovery systems to minimize organic emissions and combined usage and emission limitations

See A.2.b.

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

Emissions Unit ID: P020

## 2. Additional Terms and Conditions

- 2.a** The overall emissions of organic compound (OC) from the emissions units (emissions units P001, P002, P003, P004, P005, P008, P009, P011, P013, P015, P017, P018, and P020) shall not exceed 58.3 tons per rolling 30-day period and 180 tons per rolling 365-day period.
- 2.b** This emission unit shall be equipped with a solvent capture and recovery system that reduces the overall OC emissions by at least 90.6%, by weight, as based on a rolling 30-day period

## II. Operational Restrictions

- 1.a** The OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, and P020, shall not exceed 50% by weight, per batch.

## III. Monitoring and/or Recordkeeping Requirements

- 1.a** The permittee shall collect and record the information each day in accordance with the limits within this permit. This information shall demonstrate the following:
- a. The calculated organic compound emissions, in tons emitted per the last 30-days;
  - b. The calculated organic compound emissions, in tons emitted per the last 365-days; and
  - c. The calculated 30-day average overall capture and control efficiency of the solvents recovery system of the organic compound emissions.

The above items shall be calculated in accordance with methods and formulas as established in the agreed upon mass balance protocol.

- 1.b** The permittee shall maintain daily records that list the following information on the materials mixed in the emissions units P001, P011, P008, P009 and P020:
- a. The company identification of the materials being mixed, in each batch;
  - b. The amount of material mixed, in each batch, in pounds; and
  - c. The OC content of the materials being mixed, in percent by weight, in each batch.

## IV. Reporting Requirements

- 1.a** 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 daily records that show the OC content of the gasket mash produced by the mixers, emissions units P001, P011, P008, P009, P020, exceeds 50% by weight, per batch; and
- 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 Southwest District Office) in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

## **V. Testing Requirements**

- 1.a** Compliance with the daily organic compound emission limitations for this emissions units shall be determined based on the following equations:

For mixers:

$$E_h = (\text{MASPH}) \times \text{UVOC} \times (1-\text{CE}) + (\text{HSU}) \times (\text{CVOC}) \times (\text{EF}) \times (1-\text{CE})$$

where:

$E_h$  = allowable emission rate (lbs/hr)

MASPH = maximum amount of material per batch per hour (2092 lbs/batch/hr)

UVOC = uncontrolled VOC [assume  $4.44 \times 10^{-4}$  lbs VOC/lb of rubber]\*

HSU = Hourly Solvent Usage (2.53 gallons / hr.)

CVOC = VOC content of the cleaning solvent (7.2 lbs VOC / gal.)

EF = 10% Cleanup emission rate

CE = control efficiency ( 0.906)

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions unit.

- 1.b** Compliance with the daily PM/PM10 compound emission limitations with this emissions unit shall be determined based on the following equations:

$$E_d = [(MASPH) \times (UPE)] \times 24$$

where,

$E_d$  = allowable emission rate

MASPH = maximum amount of material per batch per hour (2,092 lbs/batch/hr)

UPE = uncontrolled PE [assume  $4.92 \times 10^{-5}$  lbs/lb of rubber]\* \*\*

\* Reference: Maximum value from draft AP-42 Section 4.12, Table 4.12-4 Internal Mixing and Milling Emission Factors for manufacture of Rubber Products.

\*\* Engineering estimate to use  $4.92 \times 10^{-5}$  lbs/lb of rubber due to lack of milling and the solids are added by hand from bag into a mix of liquids. Expected minimal particulate lose.

This facility shall maintain records that demonstrate the maximum emissions of each pollutant emitted from the above mentioned emissions units. These records shall constitute continuous record keeping as long as there is no increase in the maximum daily emissions from the above emissions units.

- 2.** Compliance with the requirements of condition "1.a." under "Monitoring and/or

Emissions Unit ID: P020

Recordkeeping Requirements" will constitute compliance with the above 30 day and 365 day OC emission limitations.

**VI. Miscellaneous Requirements**

- 1. The requirements of this Permit to Install will supercede the requirements of PTI 05-12092 for only the following emission unit: P020 (Planetary Mixer System).

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
P020 - Planetary Mixing System	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

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**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None