

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

6/25/2014

Certified Mail

Facility ID: 0575010161
Permit Number: P0115944
County: Shelby

Mr. Paul Francis
Thermoseal Inc.
2350 Campbell Road
Sidney, OH 45365-9573

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southwest District Office as indicated on page one of your permit.

Sincerely,



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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Southwest District Office



FINAL

**Division of Air Pollution Control
Title V Permit
for
Thermoseal Inc.**

Facility ID:	0575010161
Permit Number:	P0115944
Permit Type:	Renewal
Issued:	6/25/2014
Effective:	7/16/2014
Expiration:	7/16/2019



Division of Air Pollution Control
Title V Permit
for
Thermoseal Inc.

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Final Title V Permit
Thermoseal Inc.
Permit Number: P0115944
Facility ID: 0575010161
Effective Date: 7/16/2014

Authorization

Facility ID: 0575010161
Facility Description: Manufacturer of gaskets, packing and sealing devices
Application Number(s): A0048130, A0049526
Permit Number: P0115944
Permit Description: Title V permit renewal for manufacturing of gaskets, packing and sealing devices
Permit Type: Renewal
Issue Date: 6/25/2014
Effective Date: 7/16/2014
Expiration Date: 7/16/2019
Superseded Permit Number: P0088883

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

Thermoseal Inc.
2350 Campbell Road
Sidney, OH 45365-9573

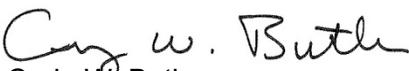
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Title V Permit
Thermoseal Inc.
Permit Number: P0115944
Facility ID: 0575010161
Effective Date: 7/16/2014

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

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

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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



c) The permittee shall submit required reports in the following manner:

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

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the



probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Southwest District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

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

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

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



enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Southwest District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

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

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



4. Risk Management Plans

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

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

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

5. Title IV Provisions

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

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

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

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

7. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.



- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

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

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

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

9. Marketable Permit Programs

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

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



10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible



Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Southwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Southwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.
 - b. The permittee's current compliance status.



- c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

14. Permit Shield

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

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

15. Operational Flexibility

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

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



16. Emergencies

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

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

17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)



19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

20. Permit to Install Requirement

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

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

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

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

23. Title VI Provisions

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



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

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

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

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA DAPC, Southwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. Inspections and Information Requests

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



whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Southwest District Office must be notified in writing of any transfer of this permit.

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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



30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Southwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



Final Title V Permit
Thermoseal Inc.
Permit Number: P0115944
Facility ID: 0575010161
Effective Date: 7/16/2014

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following are facility-wide terms and conditions:
 - a) The Ohio EPA has approved the compliance assurance monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions unit P015. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

(Authority for term: 40 CFR Part 64).
 - b) The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:
 - (1) B001 – 7.32 mmBtu Gas and Distillate fired boiler;
 - (2) B002 – 8.37 mmBtu Gas and Distillate fired boiler;
 - (3) T006 – Toluene Above Ground Tank- 6,584 Gallons (Tank #3);
 - (4) T007 – Ethanol Above Ground Tank- 6,584 Gallons (Tank #4);
 - (5) T008 – Recovered Ethanol Above Ground Tank- 6,584 Gallons (Tank #5); and
 - (6) T009 – Recovered Toluene Above Ground Tank- 6,584 Gallons (Tank #2).



Final Title V Permit
Thermoseal Inc.
Permit Number: P0115944
Facility ID: 0575010161
Effective Date: 7/16/2014

C. Emissions Unit Terms and Conditions



1. P013, Ethanol Distillation

Operations, Property and/or Equipment Description:

ethanol distillation

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

(1) b)(1)d., d)(1), d)(2), d)(3), d)(4), and e)(2), below.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01, and PTI P0110284	The organic compound (OC) emissions from this emissions unit shall not exceed 0.53 tons per year. See sections b)(2)a. and b)(2)b., below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)c., below.
c.	OAC rule 3745-21-07(M)(2)	Use of a control device. See section c)(1), below.
d.	OAC rule 3745-114-01	Ohio Toxic Rule See sections d)(1), d)(2), d)(3), d)(4), and e)(2), below.
e.	OAC rule 3745-31-05(D) (to avoid PSD thresholds)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 113 tons per rolling 365 day period.
f.	OAC rule 3745-31-05(F) (voluntary limit to account for accurate measuring of solvent usage and recovery)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 62 tons per rolling 200 operational day period.

(2) Additional Terms and Conditions

a. The annual emission limitation of 0.53 tons of organic compound (OC), from this emissions unit, is established to reflect the potential emissions from this



emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the organic compound (OC) emissions from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c) **Operational Restrictions**

- (1) This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five per cent (85%), by weight. If the reductions are achieved by incineration, ninety per cent (90%) or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The application for emissions units, P008, P009, P013, P015, P018, and P020, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:



- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 130 hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m³): 75.36 (worst case)

Maximum Hourly Emission Rate (lbs. /hr.): 27.12 (for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,852

MAGLC (ug/m³): 2,319

The permittee, has demonstrated that combined emissions of Toluene, from emissions units P008, P009, P013, P015, P018, and P020, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw



material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (2) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);



- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (4) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (5) The permittee shall maintain the following daily records; based on a rolling 200 operational days:
 - a. The date of operations;
 - b. The amount of organic materials processed*, in pounds;
 - c. The amount of organic materials employed*, in tons, based on a rolling 200 operational day period;
 - d. The amount of organic materials recovered*, in tons , based on a rolling 200 operational day period;
 - e. The overall control efficiency, in percent of organic materials recovered*, (the summation of: ("d"/"c")); and
 - f. The overall OC emission, in tons, based on a rolling 200 operational day period, (the summation of: ("c" x (1-"e"))).

Since the permittee already has sufficient record to assure compliance there is no need to establish initial record keeping requirement to assure federal enforceability of the control efficiency as established in section c) of this permit.

* The above items shall be calculated in accordance with methods and formulas as established in the April 3, 1998 Mass Balance Protocol Agreement between



Thermoseal and the Ohio EPA and the June 7, 1999, Ohio EPA letter of approval of the Mass Balance Protocol

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI P0110284 issued December 12, 2012. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 62 tons per rolling 200 operational day period;
 - b. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 113 tons per rolling 365 day period; and
 - c. All failures to achieve at least an 85% control efficiency of OC materials employed, as based on a rolling 200 operational day period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit annual reports by April 30th of each year that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
- a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s);
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.



If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI P0110284 issued on December 12, 2012. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 tons of organic compound (OC) per year

The allowable emissions are based on the following equation:

$$AER = \{[(M_p \times 3.3) + (M_p/2000 \times 0.00024)] \times (1 - C_e)\} \times (8760/2000)$$

Where:

AER = Annual emission rate, in tons; and

M_p = maximum hourly capacity, in tons, (482 lb/hr/ 2000= 0.241 tons/hr);

Emission factors are from AP-42 Table 4.7-1 (February 1980):

- i. 3.3 pounds of OC emitted per ton, condenser vent; and
- ii. 0.00024 pounds of OC emitted per ton, fugitive loading; and

C_e = Control efficiency, in percent of OC controlled, (85%, (0.85)).

Applicable Compliance Method:

Compliance shall be assumed based on the maximum capacity of this emissions unit not exceeding 1.06 tons per year (0.241 tons/hour x (8760/2000)).



Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

62 tons of organic compounds (OC) per 200 operational day rolling period for emissions units P008, P009, P013, P015, P018, and P020 combined.

The allowable emissions are based on the following equation:

$$ER = (OCu) \times (1-CE)$$

Where:

ER = Emission rate, in tons;

OCu = Organic compound material usage, in tons per 200 operational day period, in tons, (413.3); and

CE = control efficiency (0.85).

Applicable Compliance Method:

Compliance shall be assumed based on the recordkeeping requirements as established in section d) of this permit. Compliance with the rolling 365 (annual) 113 tons limitations shall be assumed based on maintaining compliance with the 62 tons rolling 200 operational day limitation.

$$113 \text{ tons}/365 \text{ day period} = 62 \text{ tons} \times (365 \text{ annual days}/200 \text{ operational days}).$$

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI P0110284 issued on December 12, 2012. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



2. P015, Calender #5

Operations, Property and/or Equipment Description:

Calender 5

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

(1) b)(1)d., d)(2), d)(3), d)(4), d(5), and e)(2), below.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Limit on the organic content of the materials employed.
b.	OAC rule 3745-31-05(D) (To avoid PSD requirements)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 113 tons per rolling 365 day period.
c.	OAC rule 3745-21-07(M)(2)	Use of a control device. See section c)(2), below.
d.	OAC rule 3745-114-01	Ohio Toxic Rule See sections d)(2), d)(3), d)(4), d(5), and e)(2), below.
e.	OAC rule 3745-31-05(F) (voluntary limit to account for accurate measuring of solvent usage and recovery)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 62 tons per rolling 200 operational day period.
f.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See c)(3), c)(4), c)(5), d)(6), and d)(7) below.

(2) Additional Terms and Conditions

a. None.



c) Operational Restrictions

(1) The materials processed through this emissions unit shall not exceed the following:

a. 50%, by weight OC content per batch.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

(2) This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five per cent (85%), by weight. If the reductions are achieved by incineration, ninety per cent (90%) or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

(3) Permittee shall calculate the overall OC emissions in accordance with the mass balance protocol approved by Ohio EPA in PTI: P0110284 and TV PTO 0088883.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

(4) Permittee shall calibrate the liquid flow meters semiannually.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

(5) Permittee shall analyze recovered solvent by GC quarterly to confirm compliance with approved purity values. The GC shall be calibrated, maintained and operated in accordance with manufacturer's recommendations and standard lab practices.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following monthly records:

a. The amount of material processed, in pounds;

b. The amount of organic compound material processed, in pounds; and

c. The OC content of the material processed, in percent by weight*.

* Based on quality control considerations, the facility does not add solvent in the calendaring process to the mash produced by the mixers. Therefore, the record keeping requirements for emissions units P020, P008, and P009, Planetary Mixer 1, and Mixers 3 and 4, as established in sections C.5.d) and C.6.d) of this permit will suffice to demonstrate compliance with the 50% by weight OC content for all in house manufactured mash materials.

[Authority for term: OAC rule 3745-77-07(C)(1)]



(2) The application for emissions units, P008, P009, P013, P015, P018, and P020, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 130 hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m3): 75.36 (worst case)



Maximum Hourly Emission Rate (lbs/hr): 27.12 (for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,852

MAGLC (ug/m3): 2,319

The permittee, has demonstrated that combined emissions of Toluene, from emissions units P008, P009, P013, P015, P018, and P020, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]



- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (6) The permittee shall maintain the following daily records; based on a rolling 200 operational days:
- a. The date of operations;
 - b. The amount of organic materials processed*, in pounds;
 - c. The amount of organic materials employed*, in tons, based on a rolling 200 operational day period;
 - d. The amount of organic materials recovered*, in tons, based on a rolling 200 operational day period;
 - e. The overall control efficiency, in percent of organic materials recovered* (the summation of: ("d"/"c")); and



- f. The overall OC emission, in tons, based on a rolling 200 operational day period, (the summation of: ("c" x (1-"e"))).

Since the permittee already has sufficient record to assure compliance there is no need to establish initial record keeping requirement to assure federal enforceability of the control efficiency as established in section c) of this permit.

* The above items shall be calculated in accordance with methods and formulas as established in the April 3, 1998 Mass Balance Protocol Agreement between Thermoseal and the Ohio EPA and the June 7, 1999, Ohio EPA letter of approval of the Mass Balance Protocol.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The CAM plan for this emissions unit has been developed for OC emissions through the capture and recovery of toluene and alcohol. The control system will have an overall control efficiency of no less than 85%. The recovered material will be reused in the mixers.

[Authority for term: 40 CFR Part 64]

- (8) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI P0110284 issued December 12, 2012. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 62 tons per rolling 200 operational day period;
 - b. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 113 tons per rolling 365 day period; and
 - c. All failures to achieve at least an 85% control efficiency of OC materials employed, as based on a rolling 200 operational day period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]



- (2) The permittee shall submit annual reports by April 30th of each year that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
- a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s);
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI P0110284 issued on December 12, 2012. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

- a. Emission Limitation:

62 tons of organic compounds (OC) per 200 operational day rolling period for emissions units P008, P009, P013, P015, P018, and P020 combined.

The allowable emissions are based on the following equation:

$$ER = (OCu) \times (1-CE)$$

Where:

ER = Emission rate, in tons;



OCu = Organic compound material usage, in tons per 200 operational day period, in tons, (413.3); and

CE = control efficiency (0.85).

Applicable Compliance Method:

Compliance shall be assumed based on the recordkeeping requirements as established in section d) of this permit. Compliance with the rolling 365 (annual) 113 tons limitations shall be assumed based on maintaining compliance with the 62 tons rolling 200 operational day limitation.

$113 \text{ tons}/365 \text{ day period} = 62 \text{ tons} \times (365 \text{ annual days}/200 \text{ operational days})$.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI P0110284 issued on December 12, 2012. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



3. P018, Vulcan Toluene Decanting

Operations, Property and/or Equipment Description:

Vulcan toluene decanting

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

(1) b)(1)d., d(1), d(2), d(3), d(4), and e)(2), below.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01, and PTI P0110284	The organic compound (OC) emissions from this emissions unit shall not exceed 1.36 tons per year. See sections b)(2)a. and b)(2)b., below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)c., below.
c.	OAC rule 3745-21-07(M)(2)	Use of a control device. See section c)(1), below.
d.	OAC rule 3745-114-01	Ohio Toxic Rule See sections d(1), d(2), d(3), d(4), and e)(2), below.
e.	OAC rule 3745-31-05(D) (to avoid PSD thresholds)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 113 tons per rolling 365 day period.
f.	OAC rule 3745-31-05(F) (voluntary limit to account for accurate measuring of solvent usage and recovery)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 62 tons per rolling 200 operational day period.

(2) Additional Terms and Conditions

a. The annual emission limitation of 1.36 tons of organic compound (OC), from this emissions unit, is established to reflect the potential emissions from this



emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the organic compound (OC) emissions from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five per cent (85%), by weight. If the reductions are achieved by incineration, ninety per cent (90%) or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The application for emissions units, P008, P009, P013, P015, P018, and P020, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:



- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 130 hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m³): 75.36 (worst case)

Maximum Hourly Emission Rate (lbs./hr): 27.12 (for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,852

MAGLC (ug/m³): 2,319

The permittee, has demonstrated that combined emissions of Toluene, from emissions units P008, P009, P013, P015, P018, and P020, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw



material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (2) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);



- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (4) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (5) The permittee shall maintain the following daily records; based on a rolling 200 operational days:
 - a. The date of operations;
 - b. The amount of organic materials processed*, in pounds;
 - c. The amount of organic materials employed*, in tons, based on a rolling 200 operational day period;
 - d. The amount of organic materials recovered*, in tons , based on a rolling 200 operational day period;
 - e. The overall control efficiency, in percent of organic materials recovered*, (the summation of: ("d"/"c")); and
 - f. The overall OC emission, in tons, based on a rolling 200 operational day period, (the summation of: ("c" x (1-"e"))).

Since the permittee already has sufficient record to assure compliance there is no need to establish initial record keeping requirement to assure federal enforceability of the control efficiency as established in section c) of this permit.

* The above items shall be calculated in accordance with methods and formulas as established in the April 3, 1998 Mass Balance Protocol Agreement between



Thermoseal and the Ohio EPA and the June 7, 1999, Ohio EPA letter of approval of the Mass Balance Protocol.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI P0110284 issued December 12, 2012. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 62 tons per rolling 200 operational day period;
 - b. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 113 tons per rolling 365 day period; and
 - c. All failures to achieve at least an 85% control efficiency of OC materials employed, as based on a rolling 200 operational day period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit annual reports by April 30th of each year that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
 - a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s);
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.



If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI P0110284 issued on December 12, 2012. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

- a. 1.36 tons pounds of organic compound (OC) per year

The allowable emissions are based on the following equation:

$$AER = \{[(Mp \times 3.3) + (Mp \times 0.00024)] \times (1 - Ce)\} \times (8760/2000)$$

Where:

AER = Annual emission rate, in tons; and

Mp = maximum hourly capacity, in tons, (1,246 lb/hr/ 2000 = 0.63 tons/hr);

Emission factors are from AP-42 Table 4.7-1 (February 1980):

- i. 3.3 pounds of OC emitted per ton, condenser vent; and
- ii. 0.00024 pounds of OC emitted per ton, fugitive loading; and

Ce = Control efficiency, in percent of OC controlled, (85%, (0.85)).

Applicable Compliance Method:

Compliance shall be assumed based on the maximum hourly capacity of this emissions unit not exceeding 0.63 tons. Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.



b. Emission Limitation:

62 tons of organic compounds (OC) per 200 operational day rolling period for emissions units P008, P009, P013, P015, P018, and P020 combined.

The allowable emissions are based on the following equation:

$$ER = (OCu) \times (1-CE)$$

Where:

ER = Emission rate, in tons;

OCu = Organic compound material usage, in tons per 200 operational day period, in tons, (413.3); and

CE = control efficiency (0.85).

Applicable Compliance Method:

Compliance shall be assumed based on the recordkeeping requirements as established in section d) of this permit. Compliance with the rolling 365 (annual) 113 tons limitations shall be assumed based on maintaining compliance with the 62 tons rolling 200 operational day limitation.

$$113 \text{ tons}/365 \text{ day period} = 62 \text{ tons} \times (365 \text{ annual days}/200 \text{ operational days}).$$

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI P0110284 issued on December 12, 2012. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



4. P019, Sealex Manufacturing

Operations, Property and/or Equipment Description:

Sealex solvent extraction oven

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

(1) b)(1)b and d)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) and PTI 05-11991, issued 4/2/2002	500.00 lbs. OC/day and 17.8 tons OC, based upon a rolling, 12-month summation of the monthly emissions. See c)(1)
b.	OAC rule 3745-114-01	Ohio Toxic Policy See d)(2)

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The maximum annual lubricant solvent usage rate for this emissions unit shall not exceed 17.8 tons based upon a rolling, 12-month summation of the lubricant solvent usage rates.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for the purpose of determining the annual organic compound emissions, based upon a 12-month summation of the monthly emissions:

a. The company identification for each organic compound material employed;



- b. The number of gallons of each organic compound material employed;
- c. The organic compound content of each organic compound material, in pounds per gallon;
- d. The OC emissions for all the liquid organic materials (Sum of (b x c) for all liquid organic materials, divided by 2000), in tons;
- e. The rolling, 12-month summation of the total OC emissions;
- f. The number of days the emissions unit was in operation;
- g. The average daily OC emissions for all the liquid organic materials employed ((d/f) x 2000), in pounds average.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

[Authority for term: OAC rule 3745-114-01, ORC 3704.03(F)(3)(c) and (F)(4)]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 05-11991 issued April 2, 2002. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions, Section A.2. of this permit and shall include the following information:
 - a. An identification of each day during which the average daily organic compound emissions exceeded 500.00 pounds per day, and the actual organic compound emissions for each such day.



- b. An identification of all exceedances of the rolling, 12-month emission limitation for OC.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall also submit annual reports which specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports can be satisfied by including these sources in the submission of the annual Fee Emission Report.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) If no deviations (excursions) occurred during a reporting period, then the deviation (excursions) reports submitted by the permittee shall state so. The permittee shall submit the quarterly deviation reports to the Director (the Southwest District Office) in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI 05-11991 issued on April 2, 2002. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

- a. Emission limitation:

500 lbs. OC/day and 17.8 tons OC/rolling, 12-month summation

Applicable compliance method:

Compliance with the daily and annual allowable OC emission limitations shall be based on the record keeping requirements specified in d)(1) of these terms and conditions.

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



- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI 05-11991 issued on April 2, 2002. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



5. P020, Planetary Mixer #1

Operations, Property and/or Equipment Description:

Planetary Mixing System

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

(1) b)(1)e, d)(2), d)(3), d)(4), d)(5), and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01, and PTI P0110284	The organic compound (OC) emissions from this emissions unit shall not exceed 1.8 tons per year. The Particulate emissions (PE) from this emissions unit shall not exceed 0.48 tons per year. See section b)(2)a., and b)(2)b., below.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)c., below.
c.	OAC rule 3745-31-05(D) (to avoid PSD thresholds)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 113 tons per rolling 365 day period.
d.	OAC rule 3745-21-07(M)(2)	Use of a control device. See section c)(2), below.
e.	OAC rule 3745-114-01	Ohio Toxic Rule See sections d)(2), d)(3), d)(4), d)(5), and e)(2), below
f.	OAC rule 3745-31-05(F) (voluntary limit to account for accurate measuring of solvent usage and recovery)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 62 tons per rolling 200 operational day period.



(2) Additional Terms and Conditions

- a. The annual emission limitations of 1.8 tons of organic compound (OC) and 0.48 tons of particulate emissions (PE), from this emissions unit, are established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- c. This paragraph applies once U.S. EPA approves the December 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and organic compound (OC) emissions from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c) Operational Restrictions

- (1) The combined amount of organic compound (OC) material being employed in emissions units P008, P009, and P020 shall not exceed 413.3 tons per rolling 200 operational days.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five per cent (85%), by weight. If the reductions are achieved by incineration, ninety per cent (90%) or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (3) The permittee shall take steps during cleanup operations to minimize and/or eliminate the loss of liquid organic cleanup solvents and the work space shall be vented to control system that meets the requirements of section "c)(2), of this permit.

[Authority for Term: OAC rule 3745-77-07(A)(1)]



- (4) The materials processed through this emissions unit shall not exceed the following:
- a. 50%, by weight OC content per batch.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain the following daily records; based on a rolling 200 operational days:
- a. The date of operations;
 - b. The amount of organic materials processed*, in pounds;
 - c. The amount of organic materials employed*, in tons, based on a rolling 200 operational day period;
 - d. The amount of organic materials recovered*, in tons , based on a rolling 200 operational day period;
 - e. The overall control efficiency, in percent of organic materials recovered*, (the summation of: (“d”/”c”)); and
 - f. The overall OC emission, in tons, based on a rolling 200 operational day period, (the summation of: (“c” x (1-“e”))).

Since the permittee already has sufficient record to assure compliance there is no need to establish initial record keeping requirement to assure federal enforceability of the control efficiency as established in section c) of this permit.

* The above items shall be calculated in accordance with methods and formulas as established in the April 3, 1998 Mass Balance Protocol Agreement between Thermoseal and the Ohio EPA and the June 7, 1999, Ohio EPA letter of approval of the Mass Balance Protocol.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The application for emissions units, P008, P009, P013, P015, P018, and P020, was evaluated based on the actual materials and the design parameters of the emissions units’ exhaust system, as specified by the permittee. The “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:



- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 130 hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m³): 75.36 (worst case)

Maximum Hourly Emission Rate (lbs/hr): 27.12 (for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,852

MAGLC (ug/m³): 2,319

The permittee, has demonstrated that combined emissions of Toluene, from emissions units P008, P009, P013, P015, P018, and P020, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).



[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);



- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (6) The permittee shall collect and record the following monthly records:
 - a. The amount of material processed, in pounds;
 - b. The amount of organic compound material processed, in pounds; and
 - c. The OC content of the material processed, in percent by weight.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI P0110284 issued December 12, 2012. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 62 tons per rolling 200 operational day period;
 - b. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 113 tons per rolling 365 day period;



- c. All exceedances of 50% OC content of materials processed, as based on a monthly weighted average;
- d. All failures to achieve at least an 85% control efficiency of OC materials employed, as based on a rolling 200 operational day period; and
- e. The combined amount of organic compound (OC) material being employed in emissions units P008, P009, and P020 exceeds 413.3 tons per rolling 200 operational days.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit annual reports by April 30th of each year that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
 - a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s);
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI P0110284 issued on December 12, 2012. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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



a. Emission Limitation:

1.8 tons of organic compound (OC) per year

The allowable emissions are based on the following equation:

$$\text{AER} = \frac{[(\text{MASPH}) \times \text{UVOC} \times (1-\text{CE}) + (\text{HSU}) \times (\text{CVOC}) \times (\text{EF}) \times (1-\text{CE})] \times 8760}{2000}$$

where:

AER = Annual emission rate, in tons;

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

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

HSU = Hourly Solvent Usage, in gallons, (2.53);

CVOC = VOC content of the cleaning solvent, in pound per gallon, (7.2);

EF = 10% Cleanup emission rate; and

CE = control efficiency (0.85).

* Reference: Maximum value from the November 2008 draft AP-42 Section 4.12, Internal Mixing and Milling Emission Factors for Manufacture of Rubber Products.

Applicable Compliance Method:

Compliance shall be assumed based on the maximum hourly capacity of this emissions unit not exceeding 2092 pounds of material and 2.53 gallons of cleanup.

Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.

b. Emission Limitation:

62 tons of organic compounds (OC) per 200 operational day rolling period for emissions units P008, P009, P013, P015, P018, and P020 combined.

The allowable emissions are based on the following equation:

$$\text{ER} = (\text{OCu}) \times (1-\text{CE})$$

Where:

ER = Emission rate, in tons;



OCu = Organic compound material usage, in tons per 200 operational day period, in tons, (413.3); and

CE = control efficiency (0.85).

Applicable Compliance Method:

Compliance shall be assumed based on the recordkeeping requirements as established in section d) of this permit. Compliance with the rolling 365 (annual) 113 tons limitations shall be assumed based on maintaining compliance with the 62 tons rolling 200 operational day limitation.

113 tons/365 day period = 62 tons x (365 annual days/200 operational days).

c. Emission limitation:

0.48 tons of particulate/PM₁₀ per year

The allowable emissions are based on the following equation:

$$HER = [(MASPH) \times (UPE)] \times (8760/2000)$$

Where,

AER = Annual emission rate, in tons;

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

UPE = uncontrolled PE [assume 4.92 E -5 lbs/lb of rubber]* **

* Reference: Maximum value from the November 2008 draft AP-42 Section 4.12, Internal Mixing and Milling Emission Factors for Manufacture of Rubber Products.

** Engineering estimate to use 4.92 E-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 loss.

Applicable compliance method:

Compliance shall be assumed based on the maximum hourly capacity of this emissions unit not exceeding 2092 pounds of material. Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.

(2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI P0110284 issued on December 12, 2012. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so



that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



6. Emissions Unit Group -Mixer Group: P008,P009,

EU ID	Operations, Property and/or Equipment Description
P008	Mixer 3
P009	Mixer 4

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) b)(1)e., d)(2), d)(3), d)(4), d)(5), and e)(2), below.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 and PTI P0110284	The emissions from each emissions unit shall not exceed the following: 0.61 tons of organic compound (OC) per year; and 0.44 tons of particulate emissions (PE) See section s b)(2)a. and b)(2)b., below..
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)c., below.
c.	OAC rule 3745-31-05(D) (To avoid PSD requirements)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 113 tons per rolling 365 day period.
d.	OAC rule 3745-21-07(M)(2)	Use of a control device See section c)(2), below
e.	OAC rule 3745-114-01	Ohio Toxic Rule See sections d)(2), d)(3), d)(4), d)(5), and e)(2), below.
f.	OAC rule 3745-31-05(F) (voluntary limit to account for accurate measuring of solvent usage and recovery)	The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 shall not exceed 62 tons per rolling 200 operational day period.



(2) Additional Terms and Conditions

- a. The annual emission limitation of 0.61 tons of OC and 0.44 tons of PE, from each emissions unit, are established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- c. This paragraph applies once U.S. EPA approves the December 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and organic compound (OC) emissions from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c) Operational Restrictions

- (1) The materials processed through each emissions unit shall not exceed the following:
 - a. 50%, by weight OC content per batch.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) Each emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five per cent (85%), by weight. If the reductions are achieved by incineration, ninety per cent (90%) or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (3) The combined amount of organic compound (OC) material being employed in emissions units P008, P009, and P020 shall not exceed 413.3 tons per rolling 200 operational days.

[Authority for Term: OAC rule 3745-77-07(A)(1)]



d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain the following daily records; based on a rolling 200 operational days:
 - a. The date of operations;
 - b. The amount of organic materials processed*, in pounds;
 - c. The amount of organic materials employed*, in tons, based on a rolling 200 operational day period;
 - d. The amount of organic materials recovered*, in tons , based on a rolling 200 operational day period;
 - e. The overall control efficiency, in percent of organic materials recovered*, (the summation of: (“d”/”c”)); and
 - f. The overall OC emission, in tons, based on a rolling 200 operational day period, (the summation of: (“c” x (1-“e”))).

Since the permittee already has sufficient record to assure compliance there is no need to establish initial record keeping requirement to assure federal enforceability of the control efficiency as established in section c) of this permit.

* The above items shall be calculated in accordance with methods and formulas as established in the April 3, 1998 Mass Balance Protocol Agreement between Thermoseal and the Ohio EPA and the June 7, 1999, Ohio EPA letter of approval of the Mass Balance Protocol.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The application for emissions units, P008, P009, P013, P015, P018, and P020, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):



- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 130 hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m³): 75.36 (worst case)

Maximum Hourly Emission Rate (lbs/hr): 27.12 (for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,852

MAGLC (ug/m³): 2,319

The permittee, has demonstrated that combined emissions of Toluene, from emissions units P008, P009, P013, P015, P018, and P020, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can



affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and



- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01]

- (6) The Permittee shall collect and record the following monthly records:
 - a. The amount of material processed, in pounds;
 - b. The amount of organic compound materials processed, in pounds; and
 - c. The OC content of materials processed, in percent by weight.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI P0110284 issued December 12, 2012. The monitoring and record keeping requirements contained in the above referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 62 tons per rolling 200 operational day period;
 - b. The combined OC emissions from emissions units P008, P009, P013, P015, P018, and P020 exceed 113 tons per rolling 365 day period;
 - c. All exceedances of 50% OC content of materials processed, as based on a monthly weighted average;
 - d. All failures to achieve at least an 85% control efficiency of OC materials employed, as based on a rolling 200 operational day period; and



- e. The combined amount of organic compound (OC) material being employed in emissions units P008, P009, and P020 exceeds 413.3 tons per rolling 200 operational days.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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 the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit annual reports by April 30th of each year that include any change to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
 - a. The original model input;
 - b. The update model input;
 - c. The reason for the change(s) to the input parameter(s);
 - d. A summary of the results of the updated modeling, including the input changes; and
 - e. A statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of MAGLC.

If no changes to emissions, emissions unit(s), or exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4)], {OAC rule 3745-114-01}

- (3) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI P0110284 issued on December 12, 2012. The reporting requirements contained in the above referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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



a. Emission limitation:

0.61 tons of organic compounds (OC) per year

Applicable compliance method:

The above allowable OC emissions are based on the following equation:

$$\text{AER} = [(\text{MASPH}) \times \text{UVOC} \times (1-\text{CE})] \times (8760/2000)$$

Where:

AER = Annual emission rate, in tons;

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

UVOC = uncontrolled VOC [assume 4.44×10^{-4} lbs VOC/lb of rubber]*; and

CE = control efficiency (0.85).

* Reference: Maximum value from the November 2008 draft AP-42 Section 4.12, Internal Mixing and Milling Emission Factors for Manufacture of Rubber Products.

Applicable Compliance Methods:

Compliance shall be assumed based on the maximum hourly capacity of this emissions unit not exceeding 2092 pounds.

Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.

b. Emission Limitation:

62 tons of organic compounds (OC) per 200 operational day rolling period for emissions units P008, P009, P013, P015, P018, and P020 combined.

The allowable emissions are based on the following equation:

$$\text{ER} = (\text{OCu}) \times (1-\text{CE})$$

Where:

ER = Emission rate, in tons;

OCu = Organic compound material usage, in tons per 200 operational day period, in tons, (413.3); and

CE = control efficiency (0.85).

Applicable Compliance Method:



Compliance shall be assumed based on the recordkeeping requirements as established in section d) of this permit. Compliance with the rolling 365 (annual) 113 tons limitations shall be assumed based on maintaining compliance with the 62 tons rolling 200 operational day limitation.

113 tons/365 day period = 62 tons x (365 annual days/200 operational days).

c. Emission Limitation:

0.44 tons of particulate emissions (PE) per year

Applicable compliance method:

The above allowable OC emissions are based on the following equation:

$$\text{AER} = [(\text{MASPH}) \times \text{UPE} \times (1 - \text{CE})] \times (8760/2000)$$

Where:

AER = Annual emission rate, in tons;

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

UVOC = uncontrolled PE [assume 9.25×10^{-4} lbs. VOC/lb. of rubber]*; and

CE = control efficiency (0.95).

* Reference: Maximum value from the November 2008 draft AP-42 Section 4.12, Internal Mixing and Milling Emission Factors for Manufacture of Rubber Products.

Applicable Compliance Methods:

Compliance shall be assumed based on the maximum hourly capacity of this emissions unit not exceeding 2092 pounds.

Prior to modifying this emissions unit that would increase hourly capacity of this unit, the type of pollutant being emitted, and/or cause an increase in the hourly potential emissions; the permittee shall apply for and obtain all appropriate air pollution permits.

- (2) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the above testing requirements are as stringent as or more stringent than the testing requirements contained in PTI P0110284 issued on December 12, 2012. The testing requirements contained in the above referenced PTI are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the PTI.

[Authority for term: OAC rule 3745-77-07(C)(1)]



Final Title V Permit
Thermoseal Inc.
Permit Number: P0115944
Facility ID: 0575010161
Effective Date: 7/16/2014

g) Miscellaneous Requirements

(1) None.