



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/09/01

CERTIFIED MAIL

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

02-43-08-1155
Ohio Sealants
Jeffrey A Nelson
7405 Production Drive
Mentor, OH 44060

Dear Jeffrey A Nelson:

Enclosed is the 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.

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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Northeast District Office.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
Jim Orlemann, DAPC Engineering
Becky Castle, DAPC PMU

Ohio EPA

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

P014: Vacuum mixer
T001: 7,000-gallon napthenic oil tank
T002: 4,000-gallon soya oil tank
T008: 6,000 AST
T013: 15,000-gallon mineral spirits tank
T014: 5,000-gallon acetone tank
T015: 15,000-gallon 3T solvent tank
T016: 15,000-gallon rubber solvent tank
T017: 2,000-gallon acetone tank
Z001: Rubber grinder with baghouse
Z002: 1,200-gallon isopropal above ground storage tank
Z003: 1,200-gallon mineral spirits above ground storage tank
Z004: 1,200-gallon textile spirits above ground storage tank
Z005: 1,200-gallon isohexane above ground storage tank
Z006: 1,200-gallon xylene above ground storage tank
Z007: 2,000-gallon xylene above ground storage tank
Z008: 2,000-gallon toluene above ground storage tank
Z009: 10,000-gallon asphalt storage tank
Z010: 15,000-gallon isohexane storage tank
Z011: 5,000-gallon xylene storage tank
Z012: 5,000-gallon toluene storage tank

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

FINAL TITLE V PERMIT

Issue Date: **03/09/01**

Effective Date: **03/09/01**

Expiration Date: **03/09/06**

This document constitutes issuance to:

Ohio Sealants
7405 Production Drive
Mentor, OH 44060

of a Title V permit for Facility ID: 02-43-08-1155

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

P001 (2K mixer #1)
2000 gallon adhesive mixer Batch mixing

P002 (2K mixer #2)
2000 gallon adhesive mixer Batch mixing

P003 (R & F Mixer)
Roof and Flash horizontal Mixer Batch mixing

P005 (Shar mixers)
SBR and Latex mixers Batch mixing

P011 (100-HP Shar)
100 Hp shar mixer Batch mixing

P012 (Clear mixer)
1000 gallon clear mixer, Batch mixing

P015 (2K mixer #3)
2000 gallon adhesive mixer, Batch mixing

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in cursive script, appearing to read "Christopher Jones", is written over a solid black horizontal line.

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. 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.

7. Fees

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

8. Marketable Permit Programs

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

9. Reasonably Anticipated Operating Scenarios

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen 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.

11. Federal and State Enforceability

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement.

Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed

therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

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

16. Off Permit Changes

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

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

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

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

17. Compliance Method Requirements

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

18. Insignificant Activity

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

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. 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.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. 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.

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

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

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #1 (P001)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 2K mixer #1 (P001)

Activity Description: 2000 gallon adhesive mixer Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. 2K mixer #1. 2,000-gallon adhesive mixer, includes control equipment consisting of a total enclosed mixer, nitrogen blanket, a condenser, and a baghouse.	OAC rule 3745-17-07 (A)	Except as provided by rule, the permittee shall not cause or allow the discharge of visible particulate emissions into the ambient air from any stack associated with this emissions unit greater than twenty percent (20%) opacity, as a six-minute average.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions into the ambient air from any stack associated with this emissions unit of greater than 7.58 pounds per hour. See section A.1.2.b of these terms and conditions.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07 (G)(2)	Organic compound emissions from this emissions unit shall be reduced by at least eighty-five per cent (85%), by weight, as an overall control efficiency. See section A.1.2.a of these terms and conditions.
	OAC rule 3745-31-05 (A)(3) PTI No. 02-02306	Organic compound emissions, including OC emissions from cleanup materials, from emissions units P001, P002, P003, P005, T001, and T002, combined, shall not exceed 100 tons per year, based upon a rolling, 12-month summation. The requirements of this rule also includes compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** OAC rule 3745-21-07 (G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% overall reduction in OC emissions. An OC control system, which includes an enclosed mixer, a nitrogen blanket, and a condenser, is employed to comply with the requirement to achieve an 85% overall reduction in OC emissions, instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.
- 2.b** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

- 1.** The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- 2.** The pressure drop across the baghouse shall be maintained within the range of 0.5 - 4 inches of water while this emissions unit is in operation.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #1 (P001)**

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be plus or minus 1 percent of the temperature being measured or plus or minus 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while this emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
3. The permittee shall collect and record the following information for each day:
 - a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall keep the following information for this emissions unit each month:
- Name and company identification for each sealant produced.
 - The total number of batches of each sealant processed, "BS", in batches per month.
 - The emission factor of each sealant, in pounds OC per batch, defined as "EF" and calculated as follows:

$$EF = [(TM)_{in} - (TM)_{out}][1 - (OCE/100)]$$

Where,

(TM)_{in} = the total material put in the mixer including cleanup materials, in pounds per batch

(TM)_{out} = the total material released from the mixer including cleanup materials, in pounds per batch

OCE = the overall control efficiency, in percentage (%), determined by the most recent stack test

The permittee shall determine the emission factor for each sealant manufactured in this emissions unit.

- The total OC emissions from all the batches of sealant processed, in tons per month, defined as TOCs and calculated as follows:

TOCs = the sum, from $i = 1$ to $i = n$, of $(BS \times EF)_i$, divided by 2000 pounds per ton,

Where,

i = subscript denoting an individual sealant

n = the total number of different sealants

- The name and company identification number for each solvent, including cleanup materials, employed in the adhesive manufacturing operations.
- The total amount of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "AS", in gallons per month.
- The density of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "DS", in pounds per gallon.

III. Monitoring and/or Record Keeping Requirements (continued)

h. The total OC emissions from all the solvents, including cleanup materials, employed in the adhesive manufacturing operations, in tons per month, defined as "TOCa" and calculated as follows:

TOCa = the sum, from $i = 1$ to $i = n$ of $(AS \times DS)_i \times SL \times [1 - (OCE/100)]$, and divided by 2000 pounds per ton,

Where,

i = subscript denoting an individual solvent used in making adhesive

n = the total number of different solvents used in making adhesives

SL = the maximum solvent loss, 2% (0.02), from AP - 42 , May 1983, section 6.4.1, Paint Manufacturing

OCE = the overall control efficiency, in percentage (%), determined by the most recent stack test

i. The total OC emissions from this emissions unit, in tons per month, defined as "TOC" and calculated as follow:

TOC = TOCs + TOCa

j. The rolling, 12-month summation of the total OC emissions from this emissions unit, in tons.

5. The permittee shall keep the following information each month for emissions units T001 and T002:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

6. The permittee shall keep the following information each month for emissions units P001, P002, P003, P005, T001, and T002, combined:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour periods of operation during which the average temperature of exhaust gases from the condenser was more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not maintain at the required levels specified in section A.II.2 of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #1 (P001)**

IV. Reporting Requirements (continued)

3. The permittee shall submit deviation (excursion) report that identify each month during which the rolling, 12-month OC emissions from emissions units P001, P002, P003, P005, T001 and T002, combined, exceeded 100 tons, and the actual rolling 12-month OC emissions for each such month.
4. All deviation (excursion) reports shall be submitted in accordance with section A.1.c of the General Terms and Conditions.
5. The permittee shall submit quarterly reports which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
6. The permittee shall submit annual reports that specify the total OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined. The reports shall include the calculations, shall be submitted by February 1 of each year, and shall cover the previous calendar year.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #1 (P001)**

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

20% opacity as a 6-minute average from stack

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the test methods and procedures specified in US EPA Reference Method 9.

- b. Emission Limitation:

7.58 pounds per hour of particulate emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.

- c. Emission Limitation:

85% overall control efficiency of OC emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in section A.V.2 of these terms and conditions.

- d. Emission Limitation:

100 tons OC per year, based upon a rolling, 12-month summation for emissions units P001, P002, P003, P005, T001 and T002, combined

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in section A.III.6 of these terms and conditions.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds.
 - c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the US EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

3. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials employed in this emissions unit.

Facility Name: **OSI Sealants Inc. Mentor**
Facility ID: **02-43-08-1155**
Emissions Unit: **2K mixer #1 (P001)**

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #1 (P001)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 2K mixer #2 (P002)

Activity Description: 2000 gallon adhesive mixer Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. 2K mixer #2. 2,000-gallon adhesive mixer, includes control equipment consisting of a total enclosed mixer, nitrogen blanket, a condenser, and a baghouse.	OAC rule 3745-17-07 (A)	Except as provided by rule, the permittee shall not cause or allow the discharge of visible particulate emissions into the ambient air from any stack associated with this emissions unit greater than twenty percent (20%) opacity, as a six-minute average.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions into the ambient air from any stack associated with this emissions unit of greater than 7.58 pounds per hour. See section A.1.2.b of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-21-07 (G)(2)

Organic compound emissions from this emissions unit shall be reduced by at least eighty-five per cent (85%), by weight, as an overall control efficiency.

See section A.1.2.a of these terms and conditions.

OAC rule 3745-31-05 (A)(3)
PTI No. 02-02306

Organic compound emissions, including OC emissions from cleanup materials, from emissions units P001, P002, P003, P005, T001, and T002, combined, shall not exceed 100 tons per year, based upon a rolling, 12-month summation.

The requirements of this rule also includes compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** OAC rule 3745-21-07 (G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% overall reduction in OC emissions. A control system, which includes an enclosed mixer, a nitrogen blanket, and a condenser, is employed to comply with the requirement to achieve an 85% overall reduction in OC emissions, instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.
- 2.b** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

1. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 - 4 inches of water while this emissions unit is in operation.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be plus or minus 1 percent of the temperature being measured or plus or minus 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while this emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
3. The permittee shall collect and record the following information for each day:
 - a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall keep the following information for this emissions unit each month:
- a. Name and company identification for each sealant produced.
 - b. The total number of batches of each sealant processed, "BS", in batches per month.
 - c. The emission factor of each sealant, in pounds OC per batch, to be defined as "EF" and calculated as follows:

$$EF = [(TM)_{in} - (TM)_{out}][1 - (OCE/100)]$$

Where,

(TM)_{in} = the total material put in the mixer, including cleanup materials, in pounds per batch

(TM)_{out} = the total material released from the mixer, including cleanup materials, in pounds per batch

OCE = the overall control efficiency, in percentage (%), determined by the most recent stack test

The permittee shall determine the emission factor for each sealant manufactured in this emissions unit.

- d. The total OC emissions from all the batches of sealant processed, in tons per month, defined as TOCs and calculated as follows:

TOCs = the sum, from $i = 1$ to $i = n$, of $(BS \times EF)_i$, divided by 2000 pounds per ton,

Where,

i = subscript denoting an individual sealant

n = the total number of different sealants

- e. The name and company identification number for each solvent, including cleanup materials, employed in the adhesive manufacturing operations.
- f. The total amount of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "AS", in gallons per month.
- g. The density of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "DS", in pounds per gallon.

III. Monitoring and/or Record Keeping Requirements (continued)

h. The total OC emissions from all the solvents employed in the adhesive manufacturing operations, in tons per month, defined as "TOCa" and calculated as follows:

$TOCa = \text{the sum, from } i = 1 \text{ to } i = n \text{ of } (AS \times DS)_i \times SL \times [1 - (OCE/100)]$, and divided by 2000 pounds per ton,

Where,

i = subscript denoting an individual solvent used in making adhesive

n = the total number of different solvents used in making adhesives

SL = the maximum solvent loss, 2% (0.02), from AP - 42, May 1983, section 6.4.1, Paint Manufacturing

OCE = The overall control efficiency, in percentage (%), determined by the most recent stack test

i. The total organic compound emissions from this emissions unit, in tons per month, defined as "TOC" and calculated as follow:

$TOC = TOCs + TOCa$

j. The rolling, 12-month summation of the total OC emissions from this emissions unit, in tons.

5. The permittee shall keep the following information each month for emissions units T001 and T002:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

6. The permittee shall keep the following information each month for emissions units P001, P002, P003, P005, T001 and T002, combined:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour periods of operation during which the average temperature of exhaust gases from the condenser was more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not maintain at the required levels specified in section A.II.2 of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

IV. Reporting Requirements (continued)

3. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined, exceeded 100 tons, and the actual rolling, 12-month OC emissions for each such month.
4. All deviation (excursion) reports shall be submitted in accordance with section A.1.c of the General Terms and Conditions.
5. The permittee shall submit quarterly reports which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
6. The permittee shall submit annual reports that specify the total OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined. The reports shall include the calculations, shall be submitted by February 1 of each year, and shall cover the previous calendar year.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

20% opacity as a 6-minute average from stack

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the test methods and procedures specified in US EPA Reference Method 9.

- b. Emission Limitation:

7.58 pounds per hour of particulate emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.

- c. Emission Limitation:

85% overall control efficiency of OC emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in section A.V.2 of these terms and conditions.

- d. Emission Limitation:

100 tons OC per year, based upon a rolling, 12-month summation for emissions units P001, P002, P003, P005, T001 and T002, combined

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in section A.III.6 of these terms and conditions.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds.
 - c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the US EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

3. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials employed in this emissions unit.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #2 (P002)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **R & F Mixer (P003)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: R & F Mixer (P003)

Activity Description: Roof and Flash horizontal Mixer Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. R & F mixer. Roof and flash horizontal enclosed mixer, includes control equipment consisting of a total enclosed mixer, nitrogen blanket, and a baghouse.	OAC rule 3745-17-07 (A)	Except as provided by rule, the permittee shall not cause or allow the discharge of visible particulate emissions into the ambient air from any stack associated with this emissions unit greater than twenty percent (20%) opacity, as a six-minute average.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions into the ambient air from any stack associated with this emissions unit of greater than 5.56 pounds per hour. See section A.1.2.b of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **R & F Mixer (P003)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-21-07 (G)(2)

Organic compound emissions from this emissions unit shall not exceed forty (40) pounds per day and eight (8) pounds per hour.

See section A.1.2.a of these terms and conditions.

OAC rule 3745-31-05 (A)(3)
PTI No. 02-02306

Organic compound emissions from emissions units P001, P002, P003, P005, T001, and T002, combined, shall not exceed 100 tons per year, based upon a rolling, 12-month summation.

The requirements of this rule also includes compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when any photochemically reactive material is employed.
- 2.b** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

- 1.** The pressure drop across the baghouse shall be maintained within the range of 0.5 - 4 inches of water while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while this emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall keep the following information for this emissions unit each day:
- Name and company identification for each sealant produced.
 - The total number of batches of each sealant processed, "BS", in batches per day.
 - The emission factor of each sealant, in pounds OC per batch, to be defined as "EF" and calculated as follows:

$$EF = [(TM)_{in} - (TM)_{out}]$$

Where,

(TM)_{in} = the total material put in the mixer, including cleanup materials, in pounds per batch

(TM)_{out} = the total material released from the mixer, including cleanup materials, in pounds per batch

The permittee shall determine the emission factor for each sealant manufactured in this emissions unit.

- The total OC emissions from all the batches of sealant processed, in pounds per day, to be defined as TOCs and calculated as follows:

$$TOCs = \text{the sum, from } i = 1 \text{ to } i = n, \text{ of } (BS \times EF)_i,$$

Where,

i = subscript denoting an individual sealant

n = the total number of different sealants

- The name and company identification number for each solvent, including cleanup materials, employed in the adhesive manufacturing operations.
- The total amount of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "AS", in gallons per day.
- The density of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "DS", in pounds per gallon.

III. Monitoring and/or Record Keeping Requirements (continued)

h. The total OC emissions from all the solvent employed in the adhesive manufacturing operations, in pounds per day, defined as "TOCa" and calculated as follows:

$$\text{TOCa} = \text{the sum, from } i = 1 \text{ to } i = n \text{ of } (\text{AS} \times \text{DS})_i \times \text{SL},$$

Where,

i = subscript denoting an individual solvent used in making adhesive

n = the number of different solvents used in making adhesives

SL = the maximum solvent loss, 2% (0.02), from AP - 42 , May 1983, section 6.4.1, Paint Manufacturing.

i. The total OC emissions from this emissions unit, in pounds per day, defined as "TOC" and calculated as follows:

$$\text{TOC} = \text{TOCs} + \text{TOCa}$$

j. For each day during which a photochemically reactive material is employed, the total number of hours this emissions unit was in operation, "OT", in hours per day.

k. For each day during which a photochemically reactive material is employed, the average hourly OC emission rate, in pounds per hour, to be defined as "OCh" and calculated as follows:

$$\text{OCh} = (\text{TOC})/(\text{OT})$$

3. The permittee shall keep the following information each month for emissions units T001 and T002:
 - a. The monthly OC emissions, in tons per month.
 - b. The rolling, 12-month summation of the total OC emissions, in tons.
4. The permittee shall keep the following information each month for this emissions unit and emissions units P001, P002, P003, P005, T001 and T002, combined:
 - a. The monthly OC emissions, in tons per month.
 - b. The rolling, 12-month summation of the total OC emissions, in tons.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **R & F Mixer (P003)**

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from this emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not maintain at the required levels as specified in section A.II.1 of these terms and conditions.
3. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined, exceeded 100 tons, and the actual rolling, 12-month OC emissions for each such month.
4. All deviation (excursion) reports shall be submitted in accordance with section A.1.c of the General Terms and Conditions.
5. The permittee shall submit annual reports that specify the total OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined. The reports shall include the calculations, shall be submitted by February 1 of each year, and shall cover the previous calendar year.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **R & F Mixer (P003)**

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

20% opacity as a 6-minute average from stack

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the test methods and procedures specified in US EPA Reference Method 9.

- b. Emission Limitation:

5.56 pounds per hour of particulate emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.

- c. Emission Limitation:

40 lbs/day and 8 lbs/hour of OC for each day during which a photochemically reactive material is employed

Applicable Compliance Method:

Compliance shall be determined based upon record keeping requirements specified in section A.III.2 of these terms and conditions.

- d. Emission Limitation:

100 tons OC per year, based upon rolling, 12-month summation for emissions units P001, P002, P003, P005, T001 and T002, combined

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in section A.III.4 of these terms and conditions.

2. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials employed in this emissions unit.

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **R & F Mixer (P003)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Shar mixers (P005)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Shar mixers (P005)

Activity Description: SBR and Latex mixers Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. Shar Mixers consisting of a Sealant and 2 Latex Mixers.	OAC rule 3745-17-07 (A)	Except as provided by rule, the permittee shall not cause or allow the discharge of visible particulate emissions into the ambient air from any stack associated with this emissions unit greater than twenty percent (20%) opacity, as a six-minute average.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions into the ambient air from any stack associated with this emissions unit of greater than 5.38 pounds per hour. See section A.1.2.b of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Shar mixers (P005)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-21-07 (G)(2)

Organic compound emissions from this emissions unit shall not exceed forty (40) pounds per day and eight (8) pounds per hour.

See section A.1.2.a of these terms and conditions.

OAC rule 3745-31-05 (A)(3)
PTI No. 02-02306

Organic compound emissions from this emissions unit shall not exceed 10 tons per year.

Organic compound emissions from emissions units P001, P002, P003, P005, T001, and T002, combined, shall not exceed 100 tons per year, based upon a rolling, 12-month summation.

The requirements of this rule also includes compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when any photochemically reactive material is employed.
- 2.b** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 is not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following information for this emissions unit each day:
 - a. Name and company identification for each sealant produced.
 - b. The total number of batches of each sealant processed, "BS", in batches per day.
 - c. The emission factor of each sealant, in pounds OC per batch, to be defined as "EF" and calculated as follows:

$$EF = [(TM)_{in} - (TM)_{out}]$$

Where,

(TM)_{in} = the total material put in the mixer, including cleanup materials, in pounds per batch

(TM)_{out} = the total material released from the mixer, including cleanup materials, in pounds per batch

The permittee shall determine the emission factor for each sealant manufactured in this emissions unit.

- d. The total OC emissions from all the batches of sealant processed, in pounds per day, defined as TOCs and calculated as follows:

$$TOCs = \text{the sum, from } i = 1 \text{ to } i = n, \text{ of } (BS \times EF)_i,$$

Where,

i = subscript denoting an individual sealant

n = the total number of different sealants

- e. The name and company identification number for each solvent, including cleanup materials, employed in the adhesive manufacturing operations.
 - f. The total amount of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "AS", in gallons per day.

III. Monitoring and/or Record Keeping Requirements (continued)

g. The density of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "DS", in pounds per gallon.

h. The total OC emissions from all the solvent employed in adhesive manufacturing operations, in pounds per day, defined as "TOCa" and calculated as follows:

$$\text{TOCa} = \text{the sum, from } i = 1 \text{ to } i = n \text{ of } (\text{AS} \times \text{DS})_i \times \text{SL},$$

Where,

i = subscript denoting an individual solvent used in making adhesive

n = the total number of different solvents used in making adhesives

SL = the maximum solvent loss, 2% (0.02), from AP - 42 , May 1983, section 6.4.1, Paint Manufacturing

i. The total OC emissions from this emissions unit, in pounds per day, to be defined as "TOC" and calculated as follows:

$$\text{TOC} = \text{TOCs} + \text{TOCa}$$

j. For each day during which a photochemically reactive material is employed, the total number of hours this emissions unit was in operation, "OT", in hours per day.

k. For each day during which a photochemically reactive material is employed, the average hourly OC emission rate, in pounds per hour, to be defined as "OCh" and calculated as follows:

$$\text{OCh} = (\text{TOC})/(\text{OT})$$

2. The permittee shall keep the following information each month for emissions units T001 and T002:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

3. The permittee shall keep the following information each month for this emissions unit and for emissions units P001, P002, P003, P005, T001 and T002, combined:

a. The monthly OC emissions, in tons per month.

b. The rolling, 12-month summation of the total OC emissions, in tons.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operating log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from this emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day.
2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month OC emissions from emissions units P001, P002, P003, P005, T001, and T002, combined, exceeded 100 tons, and the actual rolling, 12-month OC emissions for each such month.
3. All deviation (excursion) reports shall be submitted in accordance with section A.1.c of the General Terms and Conditions.
4. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and from emissions units P001, P002, P003, P005, T001, and T002, combined. The reports shall include the calculations, shall be submitted by February 1 of each year, and shall cover the previous calendar year.

IV. Reporting Requirements (continued)

5. The permittee shall submit semiannual written reports which:
 - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
20% opacity as a 6-minute average from stack

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the test methods and procedures specified in US EPA Reference Method 9.

- b. Emission Limitation:
5.38 pounds per hour of particulate emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Shar mixers (P005)**

V. Testing Requirements (continued)

c. Emission Limitation:

40 lbs/day and 8 lbs/hour of OC for each day during which a photochemically reactive material is employed

Applicable Compliance Method:

Compliance shall be determined based upon record keeping requirements specified in section A.III.1 of these terms and conditions.

d. Emission Limitation:

10 tons OC per year

Applicable Compliance Method:

Compliance shall be determined based upon record keeping requirements specified in section A.III.3 of these terms and conditions.

e. Emission Limitation:

100 tons OC per year, based upon a rolling 12-month summation for emissions units P001, P002, P003, P005, T001 and T002, combined

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping requirements specified in section A.III.3 of these terms and conditions.

2. Formulation date or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials employed in this emissions unit.

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Shar mixers (P005)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **100-HP Shar (P011)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 100-HP Shar (P011)

Activity Description: 100 Hp shar mixer Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing, 1,000-gallon Shar mixer	OAC rule 3745-17-07 (A)	The emission limit based upon this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions into the ambient air from any stack associated with this emissions unit of greater than 3.11 pounds per hour.
	OAC rule 3745-21-07 (G)(2)	See section A.1.2.a of these terms and conditions. The emission limit based upon this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **100-HP Shar (P011)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-31-05 (A)(3)
PTI No. 02-08566

There shall be no visible particulate emissions from this emissions unit.

Organic compound emissions from this emissions unit, including cleanup materials used in this emissions unit, shall not exceed forty (40) pounds per day and eight (8) pounds per hour. These limits apply to every day of operation including any day when photochemically reactive materials are not employed.

2. Additional Terms and Conditions

- 2.a** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC rule 3745-77-07 (A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install No. 02-8566, issued on December 21, 1994: section A.III.2 of this Title V permit. The monitoring and record keeping requirements contained in the above-referenced Permit to Install 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 Permit to Install.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall keep the following information for this emissions unit each day:
- Name and company identification for each sealant produced.
 - The total number of batches of each sealant processed, "BS", in batches per day.
 - The emission factor of each sealant, in pounds OC per batch, defined as "EF" and calculated as follows:

$$EF = [(TM)_{in} - (TM)_{out}]$$

Where,

(TM)_{in} = the total material put in the mixer, including cleanup materials, in pounds per batch

(TM)_{out} = the total material released from the mixer, including cleanup materials, in pounds per batch

The permittee shall determine the emission factor for each sealant manufactured in this emissions unit.

- The total OC emissions from all the batches of sealant processed, in pounds per day, to be defined as TOCs and calculated as follows:

TOCs = the sum, from $i = 1$ to $i = n$, of $(BS \times EF)_i$,

Where,

i = subscript denoting an individual sealant

n = the total number of different sealants

- The name and company identification number for each solvent, including cleanup materials, employed in the adhesive manufacturing operations.
- The total amount of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "AS", in gallons per day.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **100-HP Shar (P011)**

III. Monitoring and/or Record Keeping Requirements (continued)

g. The density of each solvent, including cleanup materials, employed in the adhesive manufacturing operations, "DS", in pounds per gallon.

h. The total OC emissions from all the solvents employed in the adhesive manufacturing operations, in pounds per day, to be defined as "TOCa" and calculated as follows:

$TOCa = \text{the sum, from } i = 1 \text{ to } i = n \text{ of } (AS \times DS)_i \times SL,$

Where,

i = subscript denoting an individual solvent used in making adhesive, and

n = the total number of different solvents used in making adhesives.

SL = the maximum solvent loss, 2% (0.02), from AP - 42 , May 1983, section 6.4.1, Paint Manufacturing

i. The total OC emissions from this emissions unit, in pounds per day, to be defined as "TOC" and calculated as follows:

$TOC = TOCs + TOCa$

j. The total number of hours this emissions unit was in operation, "OT", in hours per day.

k. The average hourly OC emission rate, in pounds per hour, to be defined as "OCh" and calculated as follows:

$OCh = (TOC)/(OT)$

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operating log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from this emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day.
2. The permittee shall submit semiannual written reports which:
 - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
No visible emissions of particulate matter from the stack

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with the procedures specified in US EPA Reference Method 22.
 - b. Emission Limitation:
3.11 pounds per hour of particulate emissions

Applicable Compliance Method:
Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.
 - c. Emission Limitation:
40 lbs/day and 8 lbs/hour of OC for each day

Applicable Compliance Method:
Compliance shall be determined based upon record keeping requirements specified in section A.III.2 of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **100-HP Shar (P011)**

V. Testing Requirements (continued)

2. Formulation date or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials employed in this emissions unit.

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **100-HP Shar (P011)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Clear mixer (P012)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Clear mixer (P012)

Activity Description: 1000 gallon clear mixer, Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. 1,000-gallon vertical clear mixer includes control equipment consisting of a total enclosed mixer, nitrogen blanket, a condenser, and a baghouse.	OAC rule 3745-17-07 (A)	The emission limit based upon this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-11	The permittee shall not cause or allow the discharge of particulate emissions from this emissions unit of greater than 7.41 pounds per hour.
	OAC rule 3745-21-07 (G)(2)	See section A.1.2.b of these terms and conditions. Organic compound emissions from this emissions unit shall be reduced by at least eighty-five per cent (85%), by weight, as an overall control efficiency.
		See section A.1.2.a of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Clear mixer (P012)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-31-05 (A)(3)
PTI No. 02-08566

There shall be no visible particulate emissions from this emissions unit.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** OAC rule 3745-21-07 (G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% overall reduction in OC emissions. An OC control system, which includes an enclosed mixer, a nitrogen blanket, a conservation vent, and a condenser, is employed to comply with the requirement to achieve an 85% overall reduction in OC emissions, instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.
- 2.b** The particulate emission limitation for this emissions unit is based upon Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply to this emissions unit because the uncontrolled mass rate of particulate emissions is less than 10 pounds per hour.

II. Operational Restrictions

1. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 - 4 inches of water while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC rule 3745-77-07 (A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install No. 02-8566, issued on December 21, 1994: sections A.III.2 - A.III.4 of this Title V permit. The monitoring and record keeping requirements contained in the above-referenced Permit to Install 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 Permit to Install.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be plus or minus 1 percent of the temperature being measured or plus or minus 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while this emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
4. The permittee shall collect and record the following information for each day:
 - a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour periods of operation during which the average temperature of exhaust gases from condenser was more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not maintain at the required levels as specified in section A.II.2 of these terms and conditions.
3. The permittee shall submit quarterly reports which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
No visible emissions of particulate matter from the stack

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with the procedures specified in US EPA Reference Method 22.
 - b. Emission Limitation:
7.41 pounds particulate per hour

Applicable Compliance Method:
Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.
 - c. Emission Limitation:
85% overall control efficiency of OC emissions

Applicable Compliance Method:
Compliance shall be determined in accordance with the test methods and procedures in section A.V.2 of these terms and conditions.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds.
 - c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the US EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Clear mixer (P012)**

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **Clear mixer (P012)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 2K mixer #3 (P015)

Activity Description: 2000 gallon adhesive mixer, Batch mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch mixing. 2K mixer #3. 2,000-gallon Coweles blade mixer includes control equipment consisting of a total enclosed mixer, nitrogen blanket, a condenser, and a baghouse.	OAC rule 3745-17-07 (A)	The emission limit based upon this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-11	The emission limit based upon this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-21-07 (G)(2)	Organic compound emissions from this emissions unit shall be reduced by at least eighty-five per cent (85%), by weight, as an overall control efficiency. See section A.I.2.a of these terms and conditions.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-31-05 (A)(3)
PTI No. 02-14097

There shall be no visible particulate emissions from this emissions unit.

Particulate emissions from this emissions unit shall not exceed 1.5 pounds per hour and 6.57 tons per year.

Organic compound emissions from this emissions unit shall not exceed 3.9 pounds per hour and 17.08 tons per year.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07 (G)(2).

2. Additional Terms and Conditions

- 2.a** OAC rule 3745-21-07 (G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% overall reduction in OC emissions. An OC control system, which includes an enclosed mixer, a nitrogen blanket, a conservation vent, and a condenser, is employed to comply with the requirement to achieve an 85% overall reduction in OC emissions, instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.

II. Operational Restrictions

1. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 - 4 inches of water while this emissions unit is in operation.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be plus or minus 1 percent of the temperature being measured or plus or minus 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while this emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
3. The permittee shall collect and record the following information for each day:
 - a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour periods of operation during which the average temperature of exhaust gases from condenser was more than 11 degrees Fahrenheit above the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

IV. Reporting Requirements (continued)

- 2.** The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not maintain at the required levels as specified in section A.II.2 of these terms and conditions.
- 3.** The permittee shall submit quarterly reports which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- 4.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

No visible emissions of particulate matter from stack

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with the procedures specified in US EPA Reference Method 22.

- b. Emission Limitation:

1.5 pounds particulate emissions per hour

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 5 of 40 CFR Part 60, Appendix A, if required by Ohio EPA.

- c. Emission Limitation:

3.9 pounds OC per hour

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in Method 25 of 40 CFR Part 60, Appendix A, if required by Ohio EPA. Compliance also shall be determined based upon the following equation:

$$E = \text{MSL} \times (\text{Maximum Hourly Solvent Usage})(1 - 85\%)$$

Where,

E = Organic compound emission rate, in pounds per hour

MSL = Maximum solvent lost, expressed as a fraction. Maximum is 2% solvent lost, AP - 42, May, 1983, section 6.4.1, Paint manufacturing

85% = Minimum OC control efficiency

- d. Emission Limitation:

6.57 tons per year of particulate

17.08 tons per year of OC

Applicable Compliance Method:

The tons per year limitations were developed by multiplying the pounds per hour limitations by the maximum operating schedule of 8,760 hours per year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

- e. Emission Limitation:

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

85% overall control efficiency of OC emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the test methods and procedures in section A.V.2 of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds.
 - c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the US EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 25 or 25A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

V. Testing Requirements (continued)

d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**

Facility ID: **02-43-08-1155**

Emissions Unit: **2K mixer #3 (P015)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
----------------------------------------------------------	--------------------------------------------------	-------------------------------------------------------------------------

Batch mixing. 2K mixer #3.
2,000-gallon Coweles blade mixer
includes control equipment
consisting of a total enclosed mixer,
nitrogen blanket, a condenser, and a
baghouse.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit P015 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" Policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Xylene

TLV: 434 mg/m³

Maximum Hourly Emission Rate: 3.9 lbs/hour

Predicted 1-Hour Maximum Ground Level Concentration: 2,058 ug/m³

MAGLC: 10,333.33 ug/m³

b. Pollutant: Toluene

TLV: 188 mg/m³

Maximum Hourly Emission Rate: 3.9 lbs/hour

Predicted 1-Hour Maximum Ground Level Concentration: 2,058 ug/m³

MAGLC: 4,476.19 ug/m³

c. Pollutant: Hexane

TLV: 176 mg/m³

Maximum Hourly Emission Rate: 3.9 lbs/hour

Predicted 1-Hour Maximum Ground Level Concentration: 2,058 ug/m³

MAGLC: 4,190.48 ug/m³

III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists(ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" 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 (VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii), then the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy".
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**
Facility ID: **02-43-08-1155**
Emissions Unit: **2K mixer #3 (P015)**

VI. Miscellaneous Requirements

None

Facility Name: **OSI Sealants Inc. Mentor**
Facility ID: **02-43-08-1155**

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