



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
LAKE COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 02-02306

DATE: 3/29/2001

OSI Sealants
Jeffrey Nelson
7405 Production Dr
Mentor, OH 44060

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

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

Very truly yours,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 3/29/2001
Effective Date: 3/29/2001**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 02-02306

Application Number: 02-02306
APS Premise Number: 0243081155
Permit Fee: \$0
Name of Facility: OSI Sealants
Person to Contact: Jeffrey Nelson
Address: 7405 Production Dr
Mentor, OH 44060

Location of proposed air contaminant source(s) [emissions unit(s)]:
**7405 Production Dr
Mentor, Ohio**

Description of proposed emissions unit(s):
Administrative modification of PTI No. 02-02306 for using photochemically reactive materials.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.11 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. 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 shall be submitted pursuant to OAC rule 3745-15-06.

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

3. Risk Management Plans

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

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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any 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.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

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

1. Compliance Requirements

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

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 of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted 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. 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.

4. 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.

5. Termination of Permit To Install

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

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

7. Public Disclosure

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

8. Applicability

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

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. 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.

C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	100.00

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

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

1. The following emissions units are included in PTI # 02-02306 issued on June 4, 1986:

T001: 7,000 gallon Napthenic oil storage tank

T002: 4,000 gallon Soya oil storage tank

Each of above emission unit are exempt from Permit to Install requirements in accordance with OAC rule 3745-31-03 (A)(1)(I)(iv).

2. The following emissions units, included in PTI # 02-02306 issued on June 4, 1986, are permanently shut down:

P004: SBR white mixer

T003 - T008: Miscellaneous underground storage tanks

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Administrative modification. 2,000 gallon adhesive mixer. Batch mixing. 2K mixer #1	OAC rule 3745-21-07 (G)(2)	Organic compound emissions generated 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.
	OAC rule 3745-31-05 (A)(3)	Organic compound emissions generated from emissions units P001, P002, P003, and P005 shall not exceed 100 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% reduction in OC emissions. A OC control system, which includes enclosed mixer, a nitrogen blanket, and a condenser, is employed to comply with the requirement to achieve an 85% 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.

III. Monitoring and/or Recordkeeping 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 ± 1 percent of the temperature being measured or ± 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 collect and record the following information for each day:
3. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - a. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions.
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:

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

Where,

$(TM)_{in}$ = The total material put in the mixer, in pounds per batch

$(TM)_{out}$ = The total material released from the mixer, in pounds per batch

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

- d. The total organic compound emissions generated by sealant manufacturing operations, in tons per month, to be 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 number of different sealants

- e. The name and company identification number for each solvent, including cleanup materials, employed in adhesive manufacturing operation.
- f. The total amount of each solvent, including cleanup material, employed in adhesive manufacturing operations, "AS", in gallons per month.
- g. The density of each solvent, including cleanup material, employed in adhesive manufacturing operations, "DS", in pounds per gallon.
- h. The total OC emissions from all the solvents, including cleanup materials, employed in the adhesive manufacturing operations, in tons per month, to be defined as "TOCa" and calculated as follows:

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

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), 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, to be defined as "TOC" and calculated as follow:

$$TOC = TOCs + TOCa$$

- 5. The permittee shall keep a record of annual OC emissions from emissions unit P001, and the total OC emissions, in tons per year, from emissions units P001, P002, P003, and P005.

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.

2. 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.
3. The permittee shall submit annual reports of total OC emissions from emissions units P001, P002, P003, and P005. The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year, and shall cover the previous calendar year.

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:
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.
 - b. Emission Limitation:
100 tons OC per year from emissions units P001, P002, P003, and P005

Applicable Compliance Method:
Compliance shall be determined based upon the record keeping requirements specified in section A.III.5 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 this permit.
 - 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 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 the emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Administrative modification. 2,000 gallon adhesive mixer. Batch mixing. 2K mixer #1		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Administrative modification. 2,000 gallon adhesive mixer. Batch mixing. 2K mixer #2	OAC rule 3745-21-07 (G)(2)	Organic compound emissions generated from this emissions unit shall be reduced by at least eighty-five per cent (85%), by weight, as an overall control efficiency.
	OAC rule 3745-31-05 (A)(3)	See section A.I.2.a of these terms and conditions. Organic compound emissions generated from emissions units P001, P002, P003, and P005 shall not exceed 100 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% reduction in OC emissions. A control system, which includes enclosed mixer, a nitrogen blanket, and a condenser, is employed to comply with the requirement to achieve an 85% 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.

III. Monitoring and/or Recordkeeping 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 ± 1 percent of the temperature being measured or ± 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 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.
3. 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:

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

Where,

$(TM)_{in}$ = The total material put in the mixer, in pounds per batch

$(TM)_{out}$ = The total material released from the mixer, in pounds per batch

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

- d. The total organic compound emissions generated by sealant manufacturing operations, in tons per month, to be 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 number of different sealants

- e. The name and company identification number for each solvent, including cleanup materials, employed in adhesive manufacturing operations.
- f. The total amount of each solvent, including cleanup materials, employed in adhesive manufacturing operations, "AS", in gallons per month.
- g. The density of each solvent, including cleanup materials, employed in adhesive manufacturing operations, "DS", in pounds per gallon.
- h. The total OC emissions from all the solvents employed in the adhesive manufacturing operations, in tons per month, to be defined as "TOCa" and calculated as follows:

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

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), 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, to be defined as "TOC" and calculated as follow:

$$TOC = TOCs + TOCa$$

- 4. The permittee shall keep a record of annual OC emissions from emissions unit P002, and the total OC emissions, in tons per year, from emissions units P001, P002, P003, and P005.

IV. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports that identify all 3-hour periods of

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Emissions Unit ID: P002

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.

2. 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.
3. The permittee shall submit annual reports of total OC emissions from emissions units P001, P002, P003, and P005. The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year, and shall cover the previous calendar year.

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:
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.
 - b. Emission Limitation:
100 tons OC per year from emissions units P001, P002, P003, and P005

Applicable Compliance Method:
Compliance shall be determined based upon the record keeping requirements specified in section A.III.5 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.
 - 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 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 the emissions unit.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Administrative modification. 2,000 gallon adhesive mixer. Batch mixing. 2K mixer #2		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - Administrative modification. Roof and flash horizontal Enclosed Mixer. Batch mixing. R & F mixer.	OAC rule 3745-21-07 (G)(2)	Organic compound emissions generated from this emissions unit shall not exceeded forty (40) pounds per day and eight (8) pounds per hour.
	OAC rule 3745-31-05 (A)(3)	See section A.I.2.a of these terms and conditions. Organic compound emissions generated from emissions units P001, P002, P003, and P005 shall not exceed 100 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 This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when any photochemically reactive material is employed.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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, in pounds per batch

$(TM)_{out}$ = The total material released from the mixer, in pounds per batch

- d. For each day during which a photochemically reactive material is employed, the total organic compound emissions generated by sealant manufacturing operations, 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 number of different sealants

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

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

Where,

$i =$ subscript denoting an individual solvent used in making adhesive

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

$SL =$ the maximum solvent loss, 2% (0.02), 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:

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

2. The permittee shall keep a record of annual OC emissions from emissions unit P003, and the total OC emissions, in tons per year, from emissions units P001, P002, P003, and P005.

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 annual reports of total OC emissions from emissions units P001, P002, P003, and P005. The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year, and shall cover the previous calendar year.

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:

28

OSI Se

PTI A₁

Issued: 3/29/2001

Emissions Unit ID: P003

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.

- b. Emission Limitation:
100 tons OC per year from emissions units P001, P002, P003, and P005

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - Administrative modification. Roof and flash horizontal Enclosed Mixer. Batch mixing. R & F mixer.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

31

OSI Sealants

PTI Application: 02 02206

Issued

Facility ID: 0243081155

Emissions Unit ID: P003

None

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P005 - Administrative modification. Batch mixing. Shar Mixers consisting of 1 Sealant and 2 Latex Mixers.	OAC rule 3745-21-07 (G)(2)	Organic compound emissions generated from this emissions unit shall not exceeded forty (40) pounds per day and eight (8) pounds per hour.
	OAC rule 3745-31-05 (A)(3)	See section A.I.2.a of these terms and conditions.
		Organic compound emissions generated from this emissions unit shall not exceed 10 tons per year.
		Organic compound emissions generated from emissions units P001, P002, P003, and P005 shall not exceed 100 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 This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when any photochemically reactive material is employed.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping 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, in pounds per batch

$(TM)_{out}$ = The total material released from the mixer, in pounds per batch

- d. The total organic compound emissions generated by sealant manufacturing operations, 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 number of different sealants

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

- 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:

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

Where,

i = subscript denoting an individual solvent used in making adhesive

n = the number of different solvents used in making adhesives

SL = the maximum solvent loss, 2% (0.02), 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:

$TOC = TOCs + TOCa$

- 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, defined as "OCh" and calculated as follows:

$OCh = (TOC)/(OT)$

2. The permittee shall keep a record of annual OC emissions from this emissions unit P005, and the total OC emissions, in tons per year, from emissions units P001, P002, P003, and P005.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
- For the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - For the days during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual

OC emissions for each such day.

2. The permittee shall submit annual reports of total OC emissions from this emissions unit and from emissions units P001, P002, P003, and P005. The reports shall be submitted to the Ohio EPA Northeast District Office by February 1 of each year, and shall cover the previous calendar year.

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:
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.

- b. 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 and shall be the sum of daily emission rates for the calendar year.

- c. Emission Limitation:
100 tons OC per year from emissions units P001, P002, P003, and P005

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P005 - Administrative modification. SBR and Latex mixers. Batch mixing. Shar mixers.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

37

OSI Se

PTI A₁

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Emissions Unit ID: P005

None