

Facility ID: 1677010782 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit P005](#)
- [Go to Part II for Emissions Unit P006](#)
- [Go to Part II for Emissions Unit P008](#)
- [Go to Part II for Emissions Unit P009](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677010782 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. 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>
Silicone base compound production with condenser, DMX #2	OAC rule 3745-31-05(A)(3) PTI 16-1783	0.55 lbs VOC / Hour 2.41 tons VOC / Year 1.02 lbs./hr. PE 4.46 tons PE / Year 10% opacity as a six-minute average, except as provided by rule A chilled water condenser with a 85% minimum control efficiency to ensure the allowable mass emission rate for the VOC is obtained.
	OAC rule 3745-17-11 OAC rule 3745-21-07(G)	See 2.b below See 2.b below

2. **Additional Terms and Conditions**
 - (a) The requirements of this rule are less stringent then the requirement of OAC rule 3745-31-05(A)(3) and this permit to install.

B. Operational Restrictions

1. The temperature of the cooling water from the chiller, before entering the condenser, for any 3-hour block of time, shall not be greater than 55 degrees Fahrenheit, when the unit is in operation.
2. The chillers shall be in operation whenever the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a continuous temperature monitor which measures the temperature of the cooling water coming out of the chiller before entering the heat exchanger of the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple and monitor shall be guaranteed by the manufacturer to be within +/- 1 percent of the temperature being measured or +/- 5 degrees Fahrenheit, whichever is greater. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day that this emissions unit is in operation..

 - a. A minimum of one temperature reading of the cooling water from the chiller during each of the 8 3-hour blocks of time during the day when the emissions unit is in operation.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit

2. The permittee shall maintain the following information for this emissions unit:
 - a. the MSDS sheets for each liquid organic material employed; and
 - b. documentation as to whether or not each material is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the temperature of the cooling water to the chillers exceeded the temperature limitation specified above.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

0.55 pounds VOC per hour
2.41 Tons VOC per year.

Applicable Compliance Method:

Compliance with the allowable emissions of organic compounds shall be determined using information provided by Shincor Silicones, Inc. in their PTI application which was received on October, 4, 1996. Based on mass balance studies performed by Shincor Silicones, Inc., and their knowledge of the product.

The annual emission rate is calculated by multiplying that factor the number of batches processed during the year.

Should the process and/or equation for allowable VOC emissions change, the permittee shall reconfirm the VOC emission factors and submit appropriate documentation to the Akron RAQMD.

Emission Limitation:

1.02 lb/hr PE
4.47 tons/yr PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.
5% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677010782 Emissions Unit ID: P006 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. 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>
Finishing Mill - mixing of catalysts with silicone bases	OAC rule 3745-31-05(A)(3) (PTI #16-1204)	

OAC rule 3745-17-07(A)(1)	See A.2.a below
OAC rule 3745-17-07(B)(1)	See A.2.b below.
OAC rule 3745-17-08	0.03 grain/dscf particulates
OAC rule 3745-17-11	See A.2.c below

2. **Additional Terms and Conditions**

- (a) Visible emissions shall not exceed 20 percent opacity, as a 6-minute average, from the stack, except as provided by rule.
Visible emissions of fugitive dust from the finishing mill shall not exceed 20 percent opacity, as a 3-minute average.
The emissions limit established through 3745-31-05(A)(3) is as stringent or more stringent than the emissions limit established by this rule.

B. **Operational Restrictions**

1. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
2. The fabric filter baghouse shall be operated in accordance with the manufacturer's operation and maintenance instructions.
3. To ensure the baghouse is operated according to the manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, a pressure drop across the baghouse of 0 to 4 inches of water column shall be maintained at all times.
4. The permittee shall properly operate and maintain a monitoring device capable of accurately measuring the pressure drop across the fabric filter.

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

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a administrative modification.

D. **Reporting Requirements**

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
 - a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

E. Testing Requirements

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

1.72 tons per year of particulate matter

Applicable Compliance Method:

For the stack emissions, multiply the particulate emissions factor of 0.005 pound(s) of particulate emissions per unit [of raw material or product] by the actual annual [raw material usage or production] rate and divide the product by 2000. For the fugitive emissions, multiply the particulate emissions factor of 0.01 pound(s) of particulate emissions per unit [of raw material or product] by the actual annual [raw material usage or production] rate and divide the product by 2000. Then sum the values for the stack and fugitive emissions.

Emission Limitation:

0.03 grains of particulate matter per dscf

Applicable Compliance Method:

Testing may be required in the future in accordance with OAC rule 3745-17-03(B)(7).

Emission Limitation:

Visible emissions shall not exceed 20 percent opacity, as a 6-minute average, from the stack, except as provided by rule.

Applicable Compliance Method:

Compliance shall be based upon visible emissions observations in accordance with OAC rule 3745-17-03(B)(1), using test method 9 of 40 CFR Part 60, Appendix A.

Emission Limitation:

Visible emissions of fugitive dust from the finishing mill shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be based upon visible emissions observations in accordance with OAC rule 3745-17-03(B)(3), using test method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677010782 Emissions Unit ID: P008 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. 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>
Silicone base compound production with condenser, DMX #3	OAC rule 3745-31-05(A)(3) PTI 16-1783	0.55 lbs VOC / Hour 2.41 tons VOC / Year 1.02 lbs./hr. PE

4.46 tons PE / Year

10% opacity as a six-minute average, except as provided by rule

A chilled water condenser with a 85% minimum control efficiency to ensure the allowable mass emission rate for the VOC is obtained.

OAC rule 3745-17-11

See 2.b below

OAC rule 3745-21-07(G)

See 2.b below

2. Additional Terms and Conditions

- (a) The requirements of this rule are less stringent than the requirement of OAC rule 3745-31-05(A)(3) and this permit to install.

B. Operational Restrictions

- 1. The temperature of the cooling water from the chiller, before entering the condenser, for any 3-hour block of time, shall not be greater than 55 degrees Fahrenheit, when the unit is in operation.
- 2. The chillers shall be in operation whenever the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain a continuous temperature monitor which measures the temperature of the cooling water coming out of the chiller before entering the heat exchanger of the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple and monitor shall be guaranteed by the manufacturer to be within +/- 1 percent of the temperature being measured or +/- 5 degrees Fahrenheit, whichever is greater. The temperature monitor shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day that this emissions unit is in operation..

- a. A minimum of one temperature reading of the cooling water from the chiller during each of the 8 3-hour blocks of time during the day when the emissions unit is in operation.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit
- 2. The permittee shall maintain the following information for this emissions unit:
 - a. the MSDS sheets for each liquid organic material employed; and
 - b. documentation as to whether or not each material is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

- 1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the temperature of the cooling water to the chillers exceeded the temperature limitation specified above.

E. Testing Requirements

- 1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

0.55 pounds VOC per hour
2.41 Tons VOC per year.

Applicable Compliance Method:

Compliance with the allowable emissions of organic compounds shall be determined using information provided by Shincor Silicones, Inc. in their PTI application which was received on October, 4, 1996. Based on mass balance studies performed by Shincor Silicones, Inc., and their knowledge of the product.

The annual emission rate is calculated by multiplying that factor the number of batches processed during the year.

Should the process and/or equation for allowable VOC emissions change, the permittee shall reconfirm the VOC emission factors and submit appropriate documentation to the Akron RAQMD.

Emission Limitation:

1.02 lb/hr PE
4.47 tons/yr PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

5% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677010782 Emissions Unit ID: P009 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. 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>
P009 - Silicone Reactor - Silicone Gum. Uncontrolled.	OAC rule 3745-31-05(A)(3) PTI # 16-02150	*3.25 lbs./hr. Methylsiloxane emissions *14.24 tons/yr. Methylsiloxane emissions *completely methylated siloxane
	OAC rule 3745-21-07(G)(9)(f)	See A.2.a below

- 2. **Additional Terms and Conditions**
 - (a) The emissions from this emissions unit are Methylsiloxane which as defined in OAC rule 3745-21-01(B)(6) as non photochemically reactive.

B. Operational Restrictions

- 1. None

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for the silicone batch operation:
 - a. The company identification for each material employed.
 - b. The amount of each material employed, in pounds.
 - c. The siloxane content of each material, in percent by weight.
 - d. The total siloxane emission rate for all materials employed, in pounds per day.
 - e. The total number of hours the emissions unit was in operation, the number of batches.
 - f. The average hourly siloxane emission rate for all materials employed, (d)/(e), in pounds per hour (average).

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly siloxane emissions from the reactor exceeded 3.25 pounds per hour, and the actual siloxane emissions, and operating time for each such day.
- 2. Deviation (excursion) reports if needed shall be submitted to Akron Regional Air Quality Management District within 30 days of the deviation being detected. The Permittee shall include an explanation as to the cause of the deviation and any actions taken to ensure the excursion does not take place again.

E. Testing Requirements

- 1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

3.25 pounds per hour Methylsiloxane
14.24 tons per year Methylsiloxane

Applicable Compliance Method:

The Emission factor of 3.25 pounds per hour is based on the permittee's mass balance calculations, using existing engineering knowledge of the proposed emissions unit . Stack testing may be required to demonstrate compliance.

F. Miscellaneous Requirements

1. None