

Facility ID: 1652100083 Issuance type: Final State Permit To Operate

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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.

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

Facility ID: 1652100083 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

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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>
P901 - roofing products line - saturator, sand applicator, and four mixers (the terms in this permit supercede the terms in PTI 16-1249 issued 8/11/93 and PTI 16-1603 issued 1/15/97).	OAC rule 3745-31-05(A)(3) (PTI 16-02089)	3.25 pounds of organic compounds (OC) per hour
		14.24 tons of OC per year
		22.94 tons of particulate emissions (PE) per year
		See A.2.a below.
		The emission limitation specified by this rule is equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, subpart UU.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, subpart UU.
	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
		See B.2 below.
	OAC rule 3745-17-11	See A.2.b below.
	OAC rule 3745-21-07(G)	
	40 CFR Part 60, subpart UU	

2. Additional Terms and Conditions

- (a) The particulate emissions shall not exceed the following:
 - i. from the sand/granule application area:

- (a) 2.0 pounds of PE per hour;
- (b) visible particulate emissions from the stack shall not exceed twenty percent opacity, as a six-minute average;
- (c) visible particulate emissions from any fugitive dust source shall not exceed 20 percent as a three-minute average; and
- (d) the sand/granule application area shall be equipped with hoods, fans, and other equipment to adequately enclose, contain, capture, and vent particulate emissions to the stack.
 - ii. from the four asphalt mixers:
 - (a) 0.84 pound of PE per hour;
 - (b) visible particulate emissions from the stack shall not exceed twenty percent opacity, as a six-minute average; and
 - (c) the scrubber, which controls the emissions from the four mixers, shall achieve an outlet emission rate of not greater than 0.030 grains of particulate emissions per dry standard cubic foot of exhaust gases.
 - iii. from the saturator:
 - (a) 1.0 pound of PE per hour when producing mineral-surfaced roll roofing products; and
 - (b) 10.0 pounds of PE per hour when producing smooth-surfaced roll roofing products.
No permittee shall cause to be discharged into the atmosphere from any saturator:
 - i. particulate matter in excess of :
 - (a) 0.04 kilograms of particulate per megagram of asphalt shingle or mineral-surfaced roll roofing produced, or
 - (b) 0.4 kilograms of particulate per megagram of saturated felt or smooth-surfaced roll roofing produced;
 - ii. exhaust gases with opacity greater than 20 percent; and
 - iii. any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes.

B. Operational Restrictions

- 1. The maximum annual production rate for smooth-surfaced roll roofing product for this emissions unit shall not exceed 15,400 megagrams (16,975.68 tons).
- 2. The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit and for any visible particulate emissions of fugitive dust from this emissions unit (i.e., the sand/granule application area and the saturator). 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 location of the emissions (i.e., saturator stack, mixer stack, etc.);
 - b. the color of the emissions;
 - c. whether the emissions are representative of normal operations;
 - d. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - e. the total duration of any visible emission incident; and
 - f. any corrective actions taken to eliminate the visible emissions.
- 2. The permittee shall maintain monthly records of the smooth-surfaced roll roofing product produced in this emissions unit.
- 3. 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.

D. Reporting Requirements

- 1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and/or any visible particulate emissions of fugitive dust which were observed from 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.

2. The permittee shall submit annual reports that identify any exceedances of the annual smooth-surfaced roll roofing product production rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.
 3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" (as defined in OAC rule 3745-21-01(C)(5)) is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such as occurrence.
- E. Testing Requirements**
1. 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 six month prior to the permit to operate renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates from the saturator for the smooth-surfaced roll roofing products and for the mineral-surfaced roll roofing products.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. Method 5A of 40 CFR Part 60, Appendix A as describe in 40 CFR 60.474(c)(2) for the saturator for the smooth-surfaced roll roofing products and for the mineral-surfaced roll roofing products;
 - a. for the smooth-surfaced roll roofing products, the test shall be conducted while 6.8-kg (15-lb) felt is being produced; and
 - b. for the mineral-surfaced roll roofing products, the test shall be conducted while 106.6-kg (235-lb) shingle is being produced.
 - ii. The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (csQsd)/(PK)$$
 where:
 E=emission rate of particulate matter, kg/Mg
 cs=concentration of particulate matter, g/dscm (g/dscf)
 Qsd=volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
 P=asphalt roofing production rate Mg/hr (ton/hr)
 K=conversion factor, 1000g/kg [907.2/(g-Mg)/(kg-ton)]
 - iii. The asphalt roofing production rate (P) for each run shall be determined as follows: The amount of asphalt roofing produced on the saturated felt process lines shall be obtained by direct measurements. The asphalt roofing production rate is the amount produced divided by the time taken for the run.
 - iv. Method 9 of 40 CFR Part 60, Appendix A and procedures in 40 CFR 60.11 shall be used to determine the opacity for the stack exhaust; and
 - v. Method 22 of 40 CFR Part 60, Appendix A, modified so that reading are recorded every 15 seconds for a period of consecutive observations during representative conditions (in accordance with 40 CFR 60.8(c)) totaling 60 minutes for the saturator capture system. A performance test shall consist of one run.
 - d. The test(s) 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.
 2. 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).
 3. 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.
 4. 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.
 5. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation

3.25 pounds of OC per hour

Applicable Compliance Method

Multiply the OC emissions factor of 0.26 pound(s) of OC emissions per ton of product produced (AP-42, Table 11.2-4 dated 1/95) by the maximum hourly production rate.

Emission Limitation

14.24 tons of OC per year

Applicable Compliance Method

Multiply the OC emissions factor of 0.26 pound(s) of OC emissions per ton of product produced (AP-42, Table 11.2-4 dated 1/95) by the maximum hourly production rate times 8760 hours per year, then divide by 2000.
Emission Limitation

22.94 tons of PE per year

Applicable Compliance Method

Multiply the allowable particulate emission rate of 2.84 pounds of particulate emissions per hour from the sand/granule application and the four mixers by 8760 hours per year plus multiply the allowable particulate emission rate for smooth-surfaced roll roofing product of 0.4 kilograms of particulate per megagram of smooth-surfaced roll roofing produced by the maximum allowable annual production limitation (15,400 megagrams per year) divided by 0.45359 kilograms per pound plus multiply the allowable particulate emission rate for mineral-surfaced roll roofing product of 0.04 kilograms of particulate per megagram of mineral-surfaced roll roofing produced by the maximum annual production limitation minus the maximum allowable annual production for smooth-surfaced roll roofing (99,513.6 -15,400) divided by 0.45359 kilograms per pound, then divide by 2000.
Emission Limitation

2.0 pounds of PE per hour from the sand/granule application area

Applicable Compliance Method

If required, compliance with the allowable emission limitations for particulates shall be determined by using the test method(s) and procedures specified in OAC rule 3745-17-03(B)(10).
Emission Limitation

visible particulate emissions from the stack shall not exceed twenty percent opacity, as a six-minute average for the sand/granule application area

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)
Emission Limitation

visible particulate emissions from any fugitive dust source shall not exceed twenty percent as a three-minute average for the sand/granule application area

Applicable Compliance Method

OAC rule 3745-17-03(B)(3)
Emission Limitation

0.84 pound of PE per hour from the four asphalt mixers

Applicable Compliance Method

If required, compliance with the allowable emission limitations for particulates shall be determined by using the test method(s) and procedures specified in OAC rule 3745-17-03(B)(10).
Emission Limitation

visible particulate emissions from the stack shall not exceed twenty percent opacity, as a six-minute average for the four asphalt mixers

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)
Emission Limitation

the scrubber, which controls the emissions from the four mixers, shall achieve an outlet emission rate of not greater than 0.030 grains of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method

If required, compliance with the allowable emission limitations for particulates shall be determined by using the test method(s) and procedures specified in OAC rule 3745-17-03(B)(10).
Emission Limitation

1.0 pound of PE per hour when producing mineral-surfaced roll roofing products

Applicable Compliance Method

Multiply the allowable particulate emission rate for mineral-surfaced roll roofing product of 0.04 kilograms of particulate per megagram of mineral-surfaced roll roofing produced by the maximum hourly production rate.
Emission Limitation

10.0 pounds of PE per hour when producing smooth-surfaced roll roofing products

Applicable Compliance Method

Multiply the allowable particulate emission rate for smooth-surfaced roll roofing product of 0.4 kilograms of particulate per megagram of smooth-surfaced roll roofing produced by the maximum hourly production rate.
Emission Limitation

0.04 kilograms of particulate per megagram of asphalt shingle or mineral-surfaced roll roofing produced

Applicable Compliance Method

Compliance with the allowable particulate emission limitation shall be demonstrate through stack testing as required in sections E.1 through E.4 above.
Emission Limitation

0.4 kilograms of particulate per megagram of saturated felt or smooth-surfaced roll roofing produced

Applicable Compliance Method

Compliance with the allowable particulate emission limitation shall be demonstrate through stack testing as required in sections E.1 through E.4 above.
Emission Limitation

particulate matter in excess of exhaust gases with opacity greater than 20 percent

Applicable Compliance Method

As required in section E.1 above, Method 9 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR 60.11 shall be used to determine opacity.
Emission Limitation

particulate matter in excess of any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes

Applicable Compliance Method

As required in section E.1 above, Method 22 of 40 CFR Part 60, Appendix A, modified so the reading are recorded every 15 seconds for a period of consecutive observations during representative conditions (in accordance with 40 CFR 60.8(c)) totaling 60 minutes. A performance test shall consist of one run.

F. Miscellaneous Requirements

1. The terms and conditions in this permit to install 16-02089 shall supersede all the air pollution control requirements for P901 in permits to install 16-1249 and 16-1603.