

Facility ID: 1431443377 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: 1431443377 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>
P901-420 Ton/hour Asphaltic Concrete Batch Plant (modification)	OAC rule 3745-31-05(A)(3) (PTI 14-05067)	Fugitive particulate emissions (PE) shall not exceed 12.6 pounds per hour. Fugitive particulate emissions less than 10 microns in diameter (PM10) shall not exceed 11.34 pounds per hour. Particulate emissions (PE) from the fabric filter stack shall not exceed 17.6 pounds per hour. Particulate emissions less than 10 microns in diameter (PM10) from the fabric filter stack shall not exceed 11.34 pounds per hour. Carbon monoxide (CO) emissions shall not exceed 168 pounds per hour. Nitrogen oxide (NOx) emissions shall not exceed 50.4 pounds per hour. Sulfur dioxide (SO2) emissions shall not exceed 37.0 pounds per hour. Volatile organic compound (VOC) emissions shall not exceed 15.1 pounds per hour and 6.3 TPY*. See term A.2.b, A.2.e, and A.2.f. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart I, OAC rule 3745-17-07 (B), OAC rule 3745-17-08(B), OAC rule 3745-21-08(B), OAC rule 3745-23-06 and OAC rule 3745-31-05(C).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD and Title V	Carbon monoxide (CO) emissions shall not exceed 70.0 TPY*. Nitrogen oxide emissions (NOx) shall not exceed 21.0 TPY*. Sulfur dioxide emissions (SO2) shall not exceed 15.4 TPY*. Particulate emissions (PE) from the fabric filter stack shall not exceed 7.35 TPY*.

	Fugitive particulate emissions (PE) shall not exceed 5.25 TPY*.
	Particulate emissions less than 10 microns in diameter (PM10) from the fabric filter stack shall not exceed 4.73 TPY*.
40 CFR Part 60, Subpart I	Fugitive particulate emissions less than 10 microns in diameter (PM10) shall not exceed 4.73 TPY*. 0.04 grain PM per dry standard cubic foot of exhaust gases.
	The opacity emission limitation specified by this rule is less stringent than the opacity emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)	See term A.2.c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.
OAC rule 3745-17-08(B)	Use of adequate enclosures and sufficient draft to minimize or eliminate visible emissions of fugitive dust from the hot aggregate elevator, vibrating screens, and weigh hopper.
	The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the elevator loading area.
	The aggregate loaded into the storage bins shall have a moisture content sufficient to eliminate the visible emissions of fugitive dust from the elevator and the transfer point to the dryer.
OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See term A.2.g.
OAC rule 3745-23-06	See term A.2.h.
OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

* The TPY emission limitations are based on a rolling, 12-month summation.

2. **Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, production limitations, use of a baghouse and compliance with the 40 CFR Part 60, Subpart I. Visible particulate emissions from any stack associated with emissions unit P901 shall not exceed 10% opacity, as a six-minute average, except as provided by rule. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable. The hourly emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits. All recycled, used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property Allowable Specifications

arsenic 5 ppm, maximum
 cadmium 2 ppm, maximum
 chromium 10 ppm, maximum
 lead 60 ppm, maximum
 PCB's 10 ppm, maximum*
 total halogens 4000 ppm maximum
 mercury 1 ppm, maximum
 flash point 100 degrees F, minimum
 heat content 135,000 Btu/gallon, minimum
 sulfur content 0.50%

* If the permittee is burning used oil with any quantifiable level (2 ppm) of PCB's, then the permittee is subject to the notification requirements of 40 CFR 279.62.

Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On February 15, 2005, OAC rule 3745-23-06 was rescinded; therefore, this rule is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 2 inches of water to 8 inches of water while the emissions unit is in operation.
2. The maximum annual asphalt production rate for this emissions unit shall not exceed 350,000 tons per year based upon a rolling, 12-month summation of the production rates.

The permittee shall comply with the rolling 12-month production limitation immediately upon startup under this permit based on past monthly production records.

3. The use of recycled asphalt product (RAP) shall be limited to 50 percent for surface, base, and intermediate mixes.
4. The permittee is limited to burning only natural gas, #2 fuel oil, or used oil meeting the specifications listed in term A.2.e.

The permittee may not receive or burn any used oil which does not meet the specifications listed in term A.2.e without first obtaining a permit to install that authorizes the burning of such used oil.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.
2. The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The updated rolling, 12-month summation of the production rates.
 - c. The percentage of RAP in the asphalt mix.
 - d. The rolling, 12-month emissions of CO, NO_x, SO₂, PE, PM₁₀ and fugitive PE and PM₁₀ as calculated in terms E.3 and E.7.
3. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
 - a. The date of shipment or delivery.
 - b. The quantity of used oil received (gallons).
 - c. The Btu value of the used oil, in Btu/gallon.
 - d. The flash point of the used oil in degrees F.
 - e. The arsenic content, in ppm.
 - f. The cadmium content, in ppm.
 - g. The chromium content, in ppm.
 - h. The lead content, in ppm.
 - i. The PCB content, in ppm.
 - j. The total halogen content, in ppm.
 - k. The mercury content, in ppm.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Hamilton County Department of Environmental Services upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

4. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in pounds/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

D. Reporting Requirements

1. The permittee shall submit annual reports which specify the total SO₂, CO, NO_x, PE, PM₁₀, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month asphalt production rate limitation.
3. The permittee shall submit deviation (excursion) reports that identify all shipments of oil which did not comply with the allowable sulfur limit in term A.2.e.
4. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11 or term A.2.e. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.
5. The permittee shall submit pressure drop deviation(excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Term B.1.
6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for CO, NO_x, SO₂, PE, PM₁₀, and fugitive PE and PM₁₀.
7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Emission Limitation:
Visible particulate emissions from the stack shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
2. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
3. Emission Limitations:
Particulate emissions (PE) from the fabric filter stack shall not exceed 17.6 pounds per hour.
Particulate emissions less than 10 microns in diameter (PM₁₀) from the fabric filter stack shall not exceed 11.34 pounds per hour.
Carbon monoxide (CO) emissions shall not exceed 168 pounds per hour.
Nitrogen oxide (NO_x) emissions shall not exceed 50.4 pounds per hour.
Sulfur dioxide (SO₂) emissions shall not exceed 37.0 pounds per hour.
Volatile organic compound (VOC) emissions shall not exceed 15.1 pounds per hour.

Applicable Compliance Methods:

Compliance with the PM, PM₁₀, CO, NO_x, SO₂ and VOC emission limitations will be demonstrated by multiplying the maximum hourly production rate of 420 tons/hour times the following emission factors in pounds/ton:

PM: 0.042
PM₁₀: 0.027
CO: 0.40
NO_x: 0.12
SO₂: 0.088
VOC: 0.036

Emission factors from AP-42, Tables 11.1-1,11.1-5 and 11.1-6 (03/04):
4. Emission Limitations:
Fugitive particulate emissions (PE) shall not exceed 12.6 pounds per hour.
Fugitive particulate emissions less than 10 microns in diameter (PM₁₀) shall not exceed 11.34 pounds per hour.

Applicable Compliance Methods:
Compliance with the PM emissions limitation will be demonstrated by multiplying the maximum hourly production rate of 420 tons/hour times the emission factor of 0.2 pounds/ton x (1-0.85). PM₁₀ emissions are 90% of PM emissions per RACM Table 2.21-3.

Emission factors from RACM - Table 2.21-1 and the use of a 85% control efficiency for maintaining the aggregate in a moist condition.

5. Emission Limitations:

Particulate emissions (PE) from the fabric filter stack shall not exceed 7.35 TPY
 Particulate emissions less than 10 microns in diameter (PM10) from the fabric filter stack shall not exceed 4.73 TPY.
 Carbon monoxide (CO) emissions shall not exceed 70.0 TPY.
 Nitrogen oxide (NOx) emissions shall not exceed 21.0 TPY.
 Sulfur dioxide (SO2) emissions shall not exceed 15.4 TPY.
 Volatile organic compound (VOC) emissions shall not exceed 6.3 TPY.

Applicable Compliance Methods:

Compliance with the PM, CO, NOx, SO2 and VOC emissions limitations will be demonstrated by multiplying the maximum annual production rate of 350,000 tons/year times the following emission factors in pounds/ton:

PM: 0.042
 PM10: 0.027
 CO: 0.40
 NOx: 0.12
 SO2: 0.088
 VOC: 0.036

Emission factors from AP-42, Tables 11.1-1, 11.1-5 and 11.1-6 (03/04):

6. Compliance with the baghouse pressure drop limitation in term B.1 shall be demonstrated by the recordkeeping in term C.1.

7. Emission Limitations:

Fugitive particulate emissions (PE) shall not exceed 5.25 TPY.
 Fugitive particulate emissions less than 10 microns in diameter (PM10) shall not exceed 4.73 TPY.

Applicable Compliance Methods:

Compliance with the PM emissions limitation will be demonstrated by multiplying the maximum annual production rate of 350,000 Tons/year times the emission factor of 0.2 pounds/ton x (1-0.85). PM10 emissions are 90% of PM emissions per RACM Table 2.21-3.

Emission factors from RACM - Table 2.21-1 and the use of a 85% control efficiency for maintaining the aggregate in a moist condition.

8. Compliance with the annual asphalt production limit in term B.2 shall be demonstrated by the record keeping in term C.2.

9. Compliance with the used oil specifications in term A.2.e shall be demonstrated by the chemical analysis which is submitted with each shipment from the supplier.

10. 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 12 months after issuance of this permit for the primary fuel. Emissions testing shall be conducted within 60 days after switching to the secondary fuel.

b. The emission testing shall be conducted to demonstrate compliance with the pounds per hour and grains/dry standard cubic foot particulate emission rates, pounds per hour CO rate, pounds per hour NOx rate, and pounds per hour VOC rate.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60, Appendix A, Methods 1 thru 5 along with the appropriate sections listed in 40 CFR Part 60, Subpart I for PE.

40 CFR Part 60, Appendix A, Method 10 for CO.

40 CFR Part 60, Appendix A, Method 7 for NOx.

40 CFR Part 60, Appendix A, Method 18 or 25 for VOC.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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.

e. 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).

f. 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.

g. 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.

F. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A., B.1- B.4, C.1- C.4, D.1 - D.6 and E.1 - E.10.
2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.