

Facility ID: 1431341269 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: 1431341269 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> |
|--|---|---|
| 400 TPH Drum Mix Asphalt Plant w/fabric filter # 91-1. | OAC rule 3745-31-05(A)(3) (PTI 14-04936) | 8.4 lbs PM/hr. from stack emissions |
| | | 8.4 lbs PM-10/hr from stack emissions |
| | | 12 lbs PM/hr from fugitive emissions |
| | | 10.8 lbs PM-10/hr from fugitive emissions |
| | | 22.4 lbs CO/hr, 28.0 TPY* CO |
| | | 30 lbs NOx/hr, |
| | | 40.9 lbs SO2/hr, |
| | | 49.6 lbs OC/hr, |
| | | 0.035 lb arsenic/hr |
| | | 0.043 TPY arsenic* |
| 0.015 lb cadmium/hr | | |
| 0.017 TPY cadmium* | | |
| 0.07 lb chromium/hr | | |
| 0.09 TPY chromium* | | |
| 0.42 lb lead/hr | | |
| 0.52 TPY lead* | | |
| 0.07 lb PCB/hr | | |
| 0.09 TPY PCB* | | |
| 0.007 lb Mercury/hr | | |
| 0.009 TPY Mercury* | | |
| 0.051 lb HCl/hour | | |
| 0.064 TPY HCl* | | |
| | | * The TPY emission limitations are based on a rolling, 12-month summation. |
| | | See term A.2.b |
| | | The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B), OAC rule 3745-17-08(B), 40 CFR Part 60 Subpart I, OAC rule 3745-31-05(D) and OAC rule 3745-35-07(B). |
| 40 CFR Part 60 Subpart I | | Limitation established by this rule is the same as the limitation established for OAC rule 3745-31-05. |
| OAC rule 3745-17-08 (B) | | See A.2.b. and A.2.c. |
| OAC rule 3745-17-11 | | Limitation established by this rule is less stringent than the limitation established for OAC rule 3745-31-05. |
| OAC rule 3745-17-07 (A) and (B) | | Limitations established by these rules are the same or |

| | |
|---|--|
| | less stringent than the limitations established for OAC rule 3745-31-05. 62 TPY* OC |
| OAC rule 3745-31-05(D) Synthetic Minor to avoid NSR Offset Policy and Title V | |
| OAC rule 3745-31-05 (B) Synthetic Minor to avoid Title V | 10.5 TPY* PM from stack emissions 10.5 TPY* PM-10 from stack emissions 15.0 TPY* PM from fugitive emissions 13.5 TPY* PM10 from fugitive emissions 37.5 TPY* NOx 51.1 TPY* SO2 |
| | * The TPY emission limitations are based on a rolling, 12-month summation. |
| | See term B.3 |
| 40 CFR Part 60 Subpart I | 0.04 grain PM per dry standard cubic foot of exhaust gases |
| OAC rule 3745-17-07(A) | The opacity emissions limitations established by this rule are less stringent than those established by OAC rule 3745-31-05(A)(3) (BAT). |
| OAC rule 3745-17-07(B) | The emissions limitations established by this rule are less stringent than those established by OAC rule 3745-31-05(A)(3) (BAT). |
| OAC rule 3745-17-08 (B) | Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule. 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(B) | The emissions limitations established by this rule are less stringent than those established by OAC rule 3745-31-05(A)(3) (BAT). |

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 fabric filter and compliance with the Ohio EPA's Air Toxics Policy. Visible particulate emissions from any stack associated with emissions unit P901 shall be less than or equal to 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 0.35%

*Some or all of these used oil specifications exceed the Resource Conservation & Recovery Act Standards of 40 CFR Part 266.40 and OAC rule 3745-58-50, thereby making the used oil off-specification.

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 3745-58-50. 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 Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of not less than 3 inches of water or greater than 6 inches of water while the emissions unit is in operation.
2. The maximum asphaltic concrete production from this plant shall not exceed 400 tons per hour.
3. The maximum annual production rate for this emissions unit shall not exceed 1,000,000 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 records of monthly production.
4. The use of recycled asphalt product (RAP) shall be limited to 50 percent for surface, base, and intermediate mixes.
5. The permittee may not receive or burn any used oil which does not meet the specifications listed in this permit without first obtaining a permit to install that authorizes the burning of such used oil.
6. The permittee may not receive or burn any No.2 fuel oil and/or used oil which has a sulfur content greater than 0.35 percent.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). The permittee shall record the pressure drop across the baghouse once per shift.
2. 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. Date of shipment or delivery,
 - b. Quantity of used oil received (gallons),
 - c. The Btu value of the used oil (Btu/gallon),
 - d. The flash point of the used oil (oF),
 - e. The arsenic content (ppm),
 - f. The cadmium content (ppm),
 - g. The chromium content (ppm),
 - h. The lead content (ppm),
 - i. The PCB content (ppm),
 - j. The total halogen content (ppm),
 - k. The mercury content (ppm), and
 - l. The sulfur content (%).

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.

3. The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
4. For each shipment of No.2 fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
5. The permit to install for this emissions unit (P901) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde

TLV (ug/m3): 0.37

Maximum Hourly Emission Rate (lbs/hr): 1.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.94

MAGLC (ug/m3): 8.8

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently,

prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit pressure drop 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.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC 3745-279-11. If the permittee is burning used oil which exceeds the specifications found in OAC 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.
4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate.
5. The permittee shall submit annual reports which specify the total PM, PM 10, SO₂, NO_x, OC and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. The permittee shall calculate the CO, NO_x and SO₂ OC emission rates using emission factors from AP-42 Table 11.1-5.
2. The permittee shall calculate the PM, PM₁₀ and OC emission rates using the emission factors as determined during most recent stack test.
3. The fugitive emissions were calculated using the Ohio EPA Reasonably Available Control Measures manual.
4. Compliance with the visible particulate emissions limitations in term A.1 and A.2 shall be demonstrated by using Method 9, 40 CFR Part 60 Subpart A.
5. Compliance with the used oil specifications shall be demonstrated by the chemical analysis which is submitted with each shipment from the supplier.
6. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted 6 months prior to renewal of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the particulate emission rate.

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

Method 5, 40 CFR Part 60 Appendix A - if applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

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 Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. 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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

F. Miscellaneous Requirements

1. This Permit to Install supersedes Permit to Install 14-4586.
2. The following terms and conditions of this permit are federally enforceable: A., B., C.1 - C.4., D and E.