

Facility ID: 0387000348 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: 0387000348 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 - Portable drum mix asphalt plant with a maximum design capacity of 300 tons per hour, and controlled with a baghouse (modification of PTI 03-8964, issued on 4/03/96 to allow for the use of alternative fuels)	OAC rule 3745-31-05 (A)(3) (PTI 03-16368, issued 4/13/05)	Carbon monoxide (CO) emissions shall not exceed 0.23 pounds per ton of asphalt produced (See A.2.1)
		Stack Emissions:
		Sulfur dioxide (SO ₂) emissions shall not exceed 0.097 pounds per ton of asphalt produced when burning on-spec used oil, #2, #4, #6 fuel oil.
		SO ₂ emissions shall not exceed 0.0034 pounds per ton of asphalt produced when burning natural gas.
		Nitrogen oxide (NO _x) emissions shall not exceed 0.070 pounds per ton of asphalt produced when burning on-spec used oil, #2 fuel oil, #4 fuel oil, #6 fuel oil.
		NO _x emissions shall not exceed 0.026 pounds per ton of asphalt produced when burning natural gas
		Organic compounds (OC) emissions shall not exceed 0.09 pounds per ton of asphalt produced.
		Particulate matter emissions less than 10 microns in size (PM ₁₀) shall not exceed 0.023 pounds per ton of asphalt produced.
	OAC rule 3745-31-05(C)	See A.2.b-g and A.2.1 below.
		Stack Emissions:
		6.60 tons particulate emissions (PE) per rolling 12-month period
		4.60 tons PM-10 per rolling 12-month period
		19.40 tons SO ₂ per rolling 12-month period
		14.00 tons NO _x per rolling 12-month period
		46.00 tons CO per rolling 12-month period
		18.00 tons OC per rolling 12-month period
		Asphalt Load Out Emissions
		Emissions from load out operations shall not exceed 0.26 tons CO per rolling 12-month period, 0.10 tons PE per rolling 12-month period and 0.84 tons of OC

per rolling 12-month period.

Asphalt Silo Filling Emissions

Emissions from silo filling operations shall not exceed 0.24 tons CO per rolling 12-month period, 0.11 tons PE per rolling 12-month period and 2.44 tons OC per rolling 12-month period.

Cold End Fugitive Dust Emissions

Emissions of fugitive dust associated with the hopper loading, aggregate transfer operations and sand transfer operations shall not exceed 2.82 tons of PE per rolling 12-month period.

See A.2.a

40 CFR Part 60, Subpart I

Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.

Particulate emissions (PE) shall not exceed 0.04 gr/dscf of exhaust gas

OAC rule 3745-21-07(B)

See A.2.h

OAC rule 3745-21-08(B)

See A.2.h

OAC rule 3745-17-07(A)(1)

See A.2.i

OAC rule 3745-17-11(B)(1)

See A.2.i

OAC rule 3745-17-07(B)(1)

See A.2.j

OAC rule 3745-17-08(B)

See A.2.j

OAC rule 3745-18-06(E)

See A.2.m

2. **Additional Terms and Conditions**

- (a) The emission limitations per rolling 12-month period contained in A.1 are based on production restrictions (see B.1) for the purpose of establishing federally enforceable limitations to avoid Title V applicability. For purposes of federal enforceability, a limitation on OC emissions effectively restricts volatile organic compound (VOC) emissions. The permittee shall ensure that the baghouse is operated with sufficient air volume to eliminate visible fugitive emissions from the rotary drum. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section A.2.b). No visible emissions of fugitive dust from the rotary drum. Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10% opacity, as a 3-minute average. 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 aggregate storage bins. The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and 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 requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions 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 emission limitation specified by this rule is equivalent to or less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.

This emissions unit is a portable source and is applicable to the requirements of OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. The emission limitations and control requirements established by OAC rule 3745-17-07 (B) and OAC rule 3745-17-08 (B) are equivalent to or less stringent than the requirements established pursuant to OAC rule 3745-31-05 (A)(3) and NSPS Subpart I.

When the emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08, this emission unit is exempt from the requirements of OAC rule 3745-17-08(B) pursuant to OAC rule 3745-17-08(A) and is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07 (B)(1) pursuant to OAC rule 3745-17-07(B)(1)(e).

The best available technology (BAT) determination was made in accordance with U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98. Emissions unit P901 was installed in 4-96 under PTI #03-8964 with potential emissions below applicable major source thresholds. Revised emission calculations indicate that potential CO emissions exceeded the major source threshold. Actual source emissions never exceeded major source thresholds, thus requiring the application of best available control technology (BACT) equivalent control which has been determined to be 0.23 pounds of carbon monoxide per ton of asphalt produced.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and 40 CFR Part 60, Subpart I.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 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 400,000 tons per year, based upon a rolling, 12-month summation of the asphalt production.
3. The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for OC, CO and NOx.
4. The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 per cent of all aggregate materials.
5. All on-spec used oil burned in emissions unit P901 shall meet the following specifications:

Contaminant/Property Allowable Specifications

arsenic 5 ppm, maximum
 cadmium 2 ppm, maximum
 chromium 10 ppm, maximum
 lead 100 ppm, maximum
 PCB's 50 ppm, maximum*
 total halogens 4000 ppm maximum**
 mercury 1 ppm, maximum
 flash point 100 F, minimum
 heat content 135,000 Btu/gallon, minimum

* If the permittee is burning used oil with any quantifiable level >2 ppm <50 ppm of PCB's, then the permittee is subject to any applicable requirements found under 40 CFR part 279, subparts G and H and 40 CFR 761.20 (e).

** Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10 (b)(1)(ii) and OAC rule 3745-279-10 (B)(1)(b). Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the used oil burner has demonstrated the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

6. The permittee may not burn any used oil which does not meet the specifications listed in OAC rule 3745-279-11 without first obtaining an air permit to install that authorizes the burning of such used oil. The burning of used oil that does not meet specifications listed in OAC rule 3745-279-11 is subject to OAC rule 3745-279-60 through 67 and the applicable portions of 40 CFR part 761. In addition, if the permittee is burning used oil which exceed the mercury limitation and falls below the heat content limitation listed in term B.5, then this may trigger the requirement to apply for and obtain an air permit to install.
7. The burning of hazardous waste is prohibited without first complying with all applicable state and federal hazardous waste and air regulations and permits.
8. All other fuel oil combusted in this emissions unit shall only be distillate fuel (fuel oil numbers 2, 4, and 6 as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils"). The sulfur content of the number 2 distillate oil shall contain no more than 0.5 weight percent sulfur. The sulfur content of the number 4 distillate oil shall contain no more than 0.8 weight percent sulfur. The sulfur content of the number 6 distillate oil shall contain no more than 1.0 weight percent sulfur.

C. Monitoring and/or Record Keeping Requirements

1. 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:
 - The date of the shipment or delivery.
 - The quantity of used oil received.
 - The Btu value of the used oil, in Btu/gallon.
 - The flash point of the used oil, in Btu/gallon.
 - The arsenic content, in ppm.
 - The cadmium content, in ppm.
 - The chromium content, in ppm.
 - The lead content, in ppm.
 - The PCB content, in ppm.
 - The total halogen content, in ppm.
 - 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 Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analysis through an independent laboratory or 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.

2. 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 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 on daily basis.
3. The permittee shall maintain monthly records of the following information:
 - the asphalt production for each month;
 - beginning after the first 12 calendar months of operation, following issuance of this permit, the rolling, 12-month

- summation of the asphalt production;
 during the first 12 calendar months of operation, following issuance of this permit, the permittee shall record the cumulative asphalt production for each calendar month;
 the maximum percentage of RAP used for any mix.
4. For each shipment of distillate oil, received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
 5. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal (above the allowable) visible particulate emissions from the baghouse servicing this emissions unit. If visible particulate emissions are observed, the permittee shall note the following in the operation log:
 the color of the visible emissions;
 the cause of the visible emissions;
 the total duration of the visible emission incident; and
 corrective actions taken to correct the excess visible particulate emissions.
 6. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the rotary drum, the feed hoppers and cold aggregate elevator/conveyor serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation log:
 the location and color of the visible emissions;
 the cause of the visible particulate emissions;
 the total duration of any visible emissions incident; and
 any corrective actions taken to minimize or eliminate the visible emissions.
 7. While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Form Asphalt Concrete Plants form (as found in F.2). An alternative form may be used upon approval of the appropriate Ohio EPA District Office of local air agency.
 8. The permit to install for this emissions unit (P901) was evaluated based on the actual 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Heptane

TLV (ug/m3): 1,640

Maximum Hourly Emission Rate (lbs/hr): 2.82

Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 165.8

MAGLC (ug/m3): 39,047

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 still 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 applying the "Air Toxic Policy" include the following:
 changes in the composition of the materials used 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;
 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
 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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

9. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 where 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 quarterly 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 above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month asphalt production limitation; and for the first 12 calendar months of operation, following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the RAP limitation specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limits specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
5. 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 and the applicable portions of 40 CFR part 761 and shall also notify Ohio EPA if any used oil exceed the mercury limitation and falls below the heat content limitation listed in term B.4 within thirty days after the exceedance occurs. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11 and the applicable portions of 40 CFR part 761, the permittee is subject to that rule and must comply with all applicable provisions of that rule(s).
6. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any abnormal (above the allowable) visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted to the 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.
7. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the rotary drum, feed hoppers and cold aggregate elevator/conveyor serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the 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.
8. The permittee shall submit a copy of the Burner Tuning Reporting Form for Asphalt Concrete Plants form to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

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 Limitations: NOx emissions shall not exceed 0.070 pounds per ton of asphalt produced; SO2 emissions shall not exceed 0.097 pounds per ton of asphalt produced; CO emissions shall not exceed 0.23 pounds per ton of asphalt produced; OC emissions shall not exceed 0.09 pounds per ton of asphalt produced; PM10 emissions shall not exceed 0.023 pounds per ton of asphalt produced; 0.04 gr PE/dscf of exhaust gas

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within five years of the issuance of this permit.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PM10, PE, OC, CO, NOx and SO2.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

For PM10, the test methods and procedures specified in 40 CFR Part 51, Appendix M, Methods 201 and 202.

For PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

For NOx, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

For SO2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

For CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

For OC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

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

- iv. The test(s) shall be conducted while this emissions unit is operating at its maximum capacity for PM10, PE, OC, CO, NOx and SO2 and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.
- v. Asphalt production, in tons, shall also be recorded during emissions testing.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the 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 or local air agency's refusal to accept the results of the emission test(s).

Personnel from the 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 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 Ohio EPA District Office or local air agency.
Emissions Limitation: PE emissions shall not exceed 6.60 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emissions Limitation: PM-10 emissions shall not exceed 4.60 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emission Limitation: OC emissions shall not exceed 18.00 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emission Limitation: CO emissions shall not exceed 46.00 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emission Limitation: SO₂ emissions shall not exceed 19.40 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emission Limitation: NO_x emissions shall not exceed 14.00 tons per rolling 12-month period.

Applicable Compliance Method: The annual emission limitation was developed by multiplying the lb per ton of asphalt produced emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the lb per ton of asphalt produced emission limitation and the rolling 12 month asphalt production restriction, compliance with the annual emission limitation will be assumed.
Emission Limitation: Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.

Applicable Compliance Method: Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A.
Emission Limitation: No visible emissions of fugitive dust from the rotary drum.

Applicable Compliance Method: Compliance with the limitations on visible emissions of fugitive dust found in Section A.2.d of this permit shall be demonstrated by the monitoring and record keeping in Section C.6. If required, compliance shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60, Standards of Performance for New Stationary Sources, as such Appendix existed on July 1, 2002.
Emission Limitation: Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10% opacity, as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
Emissions Limitation: Fugitive PE emissions from the cold end shall not exceed 2.82 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations using emission factors from AP-42 5th Edition, Table 11.12-2 (10/01) and 11.1.2.5 (12/00):

Fugitives emissions from the cold end are calculated as follows

Weigh hopper loading:

400,000 tons of material/year X 0.0051 lb PE/ton of material = 2,040 lbs PE/yr

Aggregate transfer:

400,000 tons of aggregate/year X 0.0069 lb PE/ton of aggregate = 2,760 lbs PE/yr

Sand transfer:

400,000 tons of sand/year X 0.0021 lb PE/ton of sand = 840 lbs PE/yr

The sum of the above is 7050 lbs PE/yr X 1 ton/2000 pounds = 2.82 tons PE

Emissions Limitation: Fugitive emissions from the hot end (hot mix asphalt load-out and silo filling):
a. Emissions from load out operations shall not exceed 0.26 tons CO per rolling 12-month period, 0.10 tons PE per rolling 12-month period and 0.84 tons of OC per rolling 12-month period.

- b. Emissions from silo filling operations shall not exceed 0.24 tons CO per rolling 12-month period, 0.11 tons PE per rolling 12-month period and 2.44 tons OC per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations using emission factors from AP-42 5th Edition, Table 11.1-14 (3/2004) and the asphalt production restriction:

Known:

V = -0.5 Asphalt Volatility factor (default)

T = 325 HMA mix temp (F) (default)

Activity Pollutant Predictive Emission Factor Equation, lb/ton

Silo filling PE $EF=0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

Load-out PE $EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

Silo filling OC $EF=0.0504(-V)e^{((0.0251)(T+460)-20.43)}$

Load-out OC $EF=0.0172(-V)e^{((0.0251)(T+460)-20.43)}$

Silo filling CO $EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$

Load-out CO $EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

Based on the above information, the emission factors and emissions are as follows:

Activity Pollutant lb/ton tons/yr (at 400,000 tons/yr production)

Silo filling PE $5.86 \times 10^{-4} \times 0.15$

Load-out PE $5.22 \times 10^{-4} \times 0.13$

Silo filling OC $1.22 \times 10^{-2} \times 3.05$

Load-out OC $4.14 \times 10^{-3} \times 1.04$

Silo filling CO $1.18 \times 10^{-3} \times 0.30$

Load-out CO $1.35 \times 10^{-3} \times 0.34$

2. Burner Tuning

Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO_x, and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NO_x, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Asphalt Concrete Plants form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.2.e. The general procedure for tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally.
 - ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
 - iii. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO_x, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form.
 - iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.
 - v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form.
 - vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Asphalt Concrete Plants forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.
- Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the

date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date.

F. Miscellaneous Requirements

1. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number Source Description NSPS Regulation (Subpart)
P901 300 Ton/Hr asphalt plant Subpart I

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

Construction date (no later than 30 days after such date);
Actual start-up date (within 15 days after such date); and
Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

2. Burner Tuning Form (see next page)
3. The terms and conditions contained in Part II, A.1 through F.2 are federally enforceable.