

Facility ID: 0247000554 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: 0247000554 Emissions Unit ID: P902 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>
portable 300 TPH counter-flow drum-mix hot-mix asphalt plant, controlled by a baghouse - P902	OAC rule 3745-31-05(A)(3) (PTI 02-21526)	<p>Nitrogen oxides (NOx) emissions shall not exceed 18.98 lbs/hr.</p> <p>Sulfur dioxide (SO2) emissions shall not exceed 32.43 lbs/hr.</p> <p>Carbon monoxide (CO) emissions shall not exceed 74.18 lbs/hr.</p> <p>Volatile organic compounds (VOC) emissions shall not exceed 79.70 lbs/hr.</p> <p>Particulate emissions (PE) shall not exceed 0.030 gr/dscf of total exhaust gases.</p> <p>Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in section A.2.b below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).</p> <p>See sections A.2.a through A.2.1 below.</p> <p>Stack Emissions:</p> <p>NOx emissions shall not exceed 18.98 tons per rolling, 12-month period.</p> <p>SO2 emissions shall not exceed 32.43 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 74.18 tons per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 79.70 tons per rolling, 12-month period.</p> <p>PE shall not exceed 8.70 tons per rolling, 12-month period.</p> <p>Asphalt Load-out Emissions:</p> <p>Emissions from load-out operations shall not exceed</p>
	OAC rule 3745-31-05(C)	

0.41 ton of CO per rolling, 12-month period, 0.16 ton of PE per rolling, 12-month period and 1.16 tons of VOC per rolling, 12-month period.

**Asphalt Silo Filling Emissions:**

Emissions from silo filling operations shall not exceed 0.35 ton of CO per rolling, 12-month period, 0.18 ton of PE per rolling, 12-month period and 3.60 tons of VOC per rolling, 12-month period.

**Cold End Fugitive Dust Emissions:**

Emissions of fugitive dust associated with the weigh hopper loading, aggregate transfer operations and sand transfer operations shall not exceed 3.85 tons of PE per rolling, 12-month period.

See section A.2.k below.

See section A.2.1 below.

The emission limitations required by these applicable rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-23-06(B)

OAC rule 3745-21-08(B)

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

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

OAC rule 3745-17-07(B)

OAC rule 3745-17-08

OAC rule 3745-18-06(E)

40 CFR, Part 60, Subpart I

**2. Additional Terms and Conditions**

- (a) The permittee shall ensure that the baghouse is operated with sufficient air volume to eliminate visible fugitive emissions from the rotary drum.  
All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC rule 3745-279-11, which restricts the used oil to the following limitations:

**Contaminant/Property Allowable Specifications**

arsenic 5 ppm, maximum  
cadmium 2 ppm, maximum  
chromium 10 ppm, maximum  
lead 100 ppm, maximum  
total halogens 4,000 ppm maximum\*  
flash point 100 degrees F, minimum

The used oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

PCB's less than 2 ppm  
heat content 135,000 Btu/gallon, minimum  
mercury 1 ppm, maximum

\* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-10(B).

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

All number 2 and on-spec used oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5%, by weight.

All number 4 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.8%, by weight.

Visible particulate emissions from the stack shall not exceed 20 percent opacity, as a 3-minute average.

The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see section A.2.a).

Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10 percent 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 or eliminate 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 3745-23-06(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.

The permittee has satisfied 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.

**B. Operational Restrictions**

1. The pressure drop across the fabric filter shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.
2. The permittee may not receive or burn any used oil which does not meet the specifications listed in section A.2.b of this permit without first obtaining a permit to install that authorizes the burning of off-specification used oil. The burning of off-specification used oil is subject to OAC rules 3745-279-60 through 67.
3. The permittee has requested a federally enforceable limit on asphalt produced in order to restrict the federally enforceable potential to emit. The permittee shall not produce more than 600,000 tons per year of asphalt.
4. 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 CO and NOx.
5. The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.
6. The permittee shall only burn natural gas, propane, no. 2 fuel oil, no. 4 fuel oil and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per section E.1.a.
7. No blast furnace slag shall be employed in this emissions unit unless stack testing is performed to demonstrate that compliance with the VOC and SO<sub>2</sub> emission limitations above will be maintained.

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

1. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
  - a. the date the used oil was received at the facility;
  - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier and/or marketer;
  - c. the results of the chemical analyses demonstrating that the used oil meets the standards in OAC rule 3745-279-11 and does not contain quantifiable levels of PCBs:
    - i. arsenic content, in ppm;
    - ii. the cadmium content, in ppm;
    - iii. the chromium content, in ppm;
    - iv. the lead content, in ppm;
    - v. total halogens, in ppm;
    - vi. the PCB content, in ppm; and
    - vii. the flash point
  - d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-10(B); and
  - e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

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 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 a daily basis.
3. The permittee shall maintain monthly records of the following information:
  - a. the total asphalt production for each month;
  - b. the total asphalt produced for each fuel type for each month;
  - c. the rolling, 12-month summation of the total asphalt production and the asphalt production by fuel type; and
  - d. the maximum percentage of RAP used for any mix.
4. For each shipment of number 2 fuel oil, number 4 fuel oil and on-spec used 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 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 serving this emissions unit. If abnormal visible particulate emissions are observed, the permittee shall note the following in the operation log:
  - a. the color of the visible emissions;
  - b. the cause of the visible emissions;

- c. the total duration of the visible emission incident; and
  - d. 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 and cold aggregate elevator/conveyor serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation log:
- a. the location and color of the visible emissions;
  - b. the cause of the visible particulate emissions;
  - c. the total duration of any visible emissions incident; and
  - d. 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 for Asphalt Concrete Plants form. An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.
- 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 limitations. 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 rolling, 12-month total PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO emission limitations. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).
5. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR Part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limit specified above. These reports are due by the dates described in Part I - General Terms and Condition of this permit under section (A)(2).
7. 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 Northeast District Office of Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.
8. 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 and cold aggregate elevator/conveyor, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.
9. 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.
10. Relocation of Portable Sources
- a. Pursuant to OAC rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing the following criteria are met:
    - i. the portable emissions unit is equipped with the best available control technology for such portable emissions unit;
    - ii. the portable emissions unit is operating pursuant to a currently effective permit to install, permit to operate (PTO), or registration status;
    - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, within a minimum of 30 days prior to the scheduled relocation; and
    - iv. in the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site's judgement, the proposed site is acceptable under OAC rule 3745-15-07.
  - b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria

of OAC rule 3745-31-05(E) are met:

- i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
  - ii. the portable emissions unit is equipped with best available technology;
  - iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
  - iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
  - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
  - vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
  - vii. the portable emissions unit owner has provided Ohio EPA with 15 days written notice of the relocation.
- Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the (the permitting Ohio EPA District Office or local air agency) and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the Ohio EPA District Office or local air agency responsible for the permits for the source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties. Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

#### E. Testing Requirements

1. Compliance with the allowable emission limitations specified 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 18.98 lbs/hr.  
SO2 emissions shall not exceed 32.43 lbs/hr.  
CO emissions shall not exceed 74.18 lbs/hr.  
VOC emissions shall not exceed 79.70 lbs/hr.  
PE shall not exceed 0.030 gr/dscf of total exhaust gases.

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 60 days after achieving the maximum production rate while burning used oil.

If the plant does not switch from natural gas to used oil during the term of this permit, emission testing for PE only shall occur while burning natural gas, within six months prior to permit expiration.

Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel.

- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, 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 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; and  
for VOC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A.

The VOC pounds per hour emission rate observed during the emissions test shall be calculated in accordance with OAC 3745-21-10(C)(7) where the average molecular weight of the VOC emissions equals 16. i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC as carbon emission rate observed during testing by 16 and dividing by 12.

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 or near its maximum capacity and employing RAP unless otherwise specified or approved by the Northeast District Office of Ohio EPA.

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 Northeast District Office of Ohio EPA's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of Ohio EPA 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 Northeast District Office of Ohio EPA 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 Northeast District Office of Ohio EPA.

Emission Limitation:

PE emissions shall not exceed 8.70 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of PE per ton of asphalt produced, by the actual rolling, 12 month summation of asphalt produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.3 above), and then dividing by 2000 lbs per ton.

Emission Limitation:

VOC emissions shall not exceed 79.70 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of VOC per ton of asphalt produced, by the actual rolling, 12 month summation of asphalt produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.3 above), and then dividing by 2000 lbs per ton.

Emission Limitation:

CO emissions shall not exceed 74.18 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of CO per ton of asphalt produced, by the actual rolling, 12 month summation of asphalt produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.3 above), and then dividing by 2000 lbs per ton.

Emission Limitation:

SO2 emissions shall not exceed 32.43 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of SO2 per ton of asphalt produced, by the actual rolling, 12 month summation of asphalt produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.3 above), and then dividing by 2000 lbs per ton.

Emission Limitation:

NOx emissions shall not exceed 18.98 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of NOx per ton of asphalt produced, by the actual rolling, 12 month summation of asphalt produced, in tons per rolling, 12-month period (as derived from the records required by term and condition C.3 above), and then dividing by 2000 lbs per ton.

Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60, Appendix A, 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.

Emission Limitation:

No visible emissions of fugitive dust from the rotary drum.

Applicable Compliance Method:

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, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

Emission Limitation:

Visible emissions of fugitive dust (from areas other than the rotary drum) shall be less than or equal to 10 percent 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.

Emission Limitation:

Fugitive PE emissions from the cold end shall not exceed 3.85 tons per rolling, 12-month period. (AP-42 5th Edition, Table 11.12-2(10/01) and 11.1.2.5 (12/00))

Applicable Compliance Method:

Compliance with the annual emission limitation shall be assumed based upon the following worst case calculations:

Fugitives emissions from the cold end are calculated as follows:

Weigh hopper loading:

600,000 tons of material/year X 0.0051 lb PE/ton of material = 3,060 lbs of PE/yr

Aggregate transfer:

600,000 tons of aggregate/year X 0.0069 lb PE/ton of aggregate = 4,140 lbs of PE/yr

Sand transfer:

240,000 tons of sand/year X 0.0021 lb PE/ton of sand = 504 lbs of PE/yr

The sum of the above is 7,704 lbs of PE/yr X 1 ton/2000 pounds = 3.85 tons of PE

Emission Limitation:

Emissions of fugitive dust associated with the weigh hopper loading, aggregate transfer operations and sand transfer operations shall not exceed 3.85 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

Fugitive emissions from the hot end (hot mix asphalt (HMA) load-out and silo filling) are calculated as follows:

Asphalt plant silo filling and plant load-out emissions from AP-42, Table 11.1-14, dated 3/2004

Known:

V = -0.5 Asphalt volatility factor (default) T = 325 HMA mix temp (F) (default)  
For silo filling, 1.4% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004  
For plant load-out, 7.3% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

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 VOC EF= [0.0504(-V)e((0.0251)(T+460)-20.43)] x (1-0.014)  
Load-out VOC EF= [0.0172(-V)e((0.0251)(T+460)-20.43)] x (1-0.073)  
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 600,000 tons/yr production)

Silo filling PE 5.86 x 10<sup>-4</sup> 0.18  
Load-out PE 5.22 x 10<sup>-4</sup> 0.16  
Silo filling VOC 1.20 x 10<sup>-2</sup> 3.60  
Load-out VOC 3.86 x 10<sup>-3</sup> 1.16  
Silo filling CO 1.18 x 10<sup>-3</sup> 0.35  
Load-out CO 1.35 x 10<sup>-3</sup> 0.41

2. Burner Tuning

a. 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 emissions rates and are minimized.

b. 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.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO<sub>x</sub>, O<sub>2</sub> 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.

d. 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 term E.1.a. The baselines shall be determined for NO<sub>x</sub> 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 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 section 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 manufacture's specifications.
  - iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO<sub>x</sub> 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 per cent 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.
- e. 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. In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

**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)  
P902 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 the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

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

Reports are to be sent to the Northeast District Office of Ohio EPA.
2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification(s) to the emissions unit was less than 1 ton per year of each toxic pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices").
3. The following terms and conditions of this permit are federally enforceable: all except F.2.