☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install **06-07753**

## A. Source Description

P901 is a 200 tons per hour portable drum mix asphalt plant controlled by a baghouse.

## B. Facility Emissions and Attainment Status

Mar-Zane Plant 17 is a portable asphalt facility and is being permitted out of Muskingum County, which is currently in attainment for all criteria pollutants. When the portable emissions units associated with this facility are located at a stationary source or at a source comprised of portable emissions units under common ownership and the same SIC code, the permittee will be required to include the potential emissions from the portable emissions units in the facility potential to emit calculations for major source applicability.

## C. Source Emissions

Mar-Zane Plant 17 will limit annual production of P901 in order to restrict the federally enforceable potential to emit to avoid Title V applicability. The amount of asphalt produced will be limited to 250,000 tons asphalt per rolling, 12-month period. With the proposed production restriction, total P901 stack emissions per 12-month rolling period will be limited to 9.4 tons NOx, 13.8 tons SO2, 16.1 tons CO, 20.8 tons VOC, and 4.6 tons PE.

## D. Conclusion

The operational restrictions, emission limits, emissions testing, record keeping, and reporting requirements of this permit are sufficient to provide federally enforceable limitations to limit the potential to emit from P901. With final issuance of this permit the facility-wide potential to emit of permitted sources at Mar-Zane Plant 17 will be 9.4 tons NOx, 13.8 tons SO2, 16.1 tons CO, 20.87 tons VOC, and 4.6 tons PE (stack), 0.32 tons CO (fugitive), 3.97 tons VOC (fugitive), and 8.94 tons PE (fugitive).

OhioEPA

State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

**TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL**
**MUSKINGUM COUNTY**
**Application No:** 06-07753
**Fac ID:** 0660010225

**CERTIFIED MAIL**

| | |
|---|---|
| Y | TOXIC REVIEW |
| | PSD |
| Y | SYNTHETIC MINOR |
| | CEMS |
| | MACT |
| Subpart I | NSPS |
| | NESHAPS |
| | NETTING |
| | MAJOR NON-ATTAINMENT |
| Y | MODELING SUBMITTED |
| | GASOLINE DISPENSING FACILITY |

**DATE:** 9/8/2005

Mar Zane Plant No 17
Ronald Morrison
PO Box 1585
Zanesville, OH 43701

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$2500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **SEDO** **WV**

**MUSKINGUM COUNTY**

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **06-07753** FOR AN AIR CONTAMINANT SOURCE FOR
**Mar Zane Plant No 17**

On 9/8/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Mar Zane Plant No 17**, located at **4540 State Route 39, Perrysville**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 06-07753:

**Chapter 31 modification PTI 06 07166 to increase maximum production rate to 200 tons per hour.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Bruce Weinberg, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138 [(740)385-8501]

# DRAFT PERMIT TO INSTALL 06-07753

Application Number: 06-07753

Facility ID: 0660010225

Permit Fee: **To be entered upon final issuance**

Name of Facility: Mar Zane Plant No 17

Person to Contact: Ronald Morrison

Address: PO Box 1585
Zanesville, OH 43701

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4540 State Route 39**
**Perrysville, Ohio**

Description of proposed emissions unit(s):
**Chapter 31 modification PTI 06 07166 to increase maximum production rate to 200 tons per hour.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

## B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| Pollutant | Tons Per Year |
|---|---|
| PE (stack) | 4.6 |
| SO2 | 13.8 |
| VOC (stack) | 20.8 |
| NOx | 9.4 |
| CO (stack) | 16.1 |
| CO (fugitive) | 0.32 |
| VOC (fugitive) | 1.98 |
| PE (fugitive) | 1.44 |

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P901 - 200 TPH portable parallel flow drum mix asphalt plant<br><br>Chapter 31 modification of PTI 06-07166, issued 10/23/2003, to increase allowables for P901 based on an increase in maximum PWR. | OAC rule 3745-31-05 (A)(3) | Stack Emissions:<br><br>Nitrogen oxides ($NO_x$) emissions from burning natural gas shall not exceed 5.0 pounds per hour.<br><br>$NO_x$ emissions from burning #2 fuel oil shall not exceed 9.2 pounds per hour.<br><br>$NO_x$ emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 10.8 pounds per hour.<br><br>$NO_x$ emissions from burning on-spec used oil shall not exceed 15.1 pounds per hour.<br><br>Sulfur dioxide ($SO_2$) emissions from burning natural gas shall not exceed 2.2 pounds per hour.<br><br>$SO_2$ emissions from burning #2 fuel oil shall not exceed 13.2 pounds per hour.<br><br>$SO_2$ emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 22.0 pounds per hour. |



C:\temp\permits3\8952.wpd

| | | |
|---|---|---|
| | | $SO_2$ emissions from burning on-spec used oil shall not exceed 20.2 pounds per hour.<br><br>Carbon monoxide (CO) emissions from burning natural gas shall not exceed 22.0 pounds per hour.<br><br>CO emissions from burning #2 fuel oil shall not exceed 23.6 pounds per hour.<br><br>CO emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 25.8 pounds per hour.<br><br>CO emissions from burning on-spec used oil shall not exceed 23.2 pounds per hour.<br><br>Volatile organic compound (VOC) emissions from burning natural gas, #2 fuel oil, #4 fuel oil, or #6 fuel oil shall not exceed 20.0 pounds per hour.<br><br>VOC emissions from burning on-spec used oil shall not exceed 33.2 pounds per hour.<br><br>Particulate emissions (PE) from burning any approved fuel shall not exceed 0.04 gr/dscf.<br><br>Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in Section B.2 below.<br><br>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. |



C:\temp\permits3\8952.wpd

| | | |
|---|---|---|
| | OAC rule 3745-31-05(C) | See Sections A.2.a-k below.<br><br>Stack Emissions:<br><br>$NO_x$ emissions shall not exceed 9.4 tons per rolling, 12-month period.<br><br>$SO_2$ emissions shall not exceed 13.8 tons per rolling, 12-month period.<br><br>CO emissions shall not exceed 16.1 tons per rolling, 12-month period.<br><br>VOC emissions shall not exceed 20.8 tons per rolling, 12-month period.<br><br>PE shall not exceed 4.6 tons per rolling, 12-month period.<br><br>Asphalt Load Out Emissions:<br><br>Fugitive emissions from load out operations shall not exceed 0.17 ton CO per rolling, 12-month period, 0.07 ton PE per rolling, 12-month period, and 0.48 ton of VOC per rolling, 12-month period.<br><br>Asphalt Silo Filling Emissions:<br><br>Fugitive emissions from silo filling operations shall not exceed 0.15 ton CO per rolling, 12-month period, 0.07 ton PE per rolling, 12-month period, and 1.5 tons VOC per rolling, 12-month period. |
| | OAC rule 3745-23-06(B) | Cold End Emissions:<br><br>Fugitive emissions associated with the weigh hopper loading, |



C:\temp\permits3\8952.wpd

| | |
|---|---|
| OAC rule 3745-21-08(B) | aggregate transfer operations and sand transfer operations shall not exceed 1.3 tons of PE per rolling, 12-month period. |
| OAC rule 3745-17-07(A)(1)<br>OAC rule 3745-17-11(B)(1) | See Section A.2.j below. |
| OAC rule 3745-17-07(B)<br>OAC rule 3745-17-08 | See Section A.2.k below. |
| OAC rule 3745-18-06(E)<br>40 CFR Part 60, Subpart I | The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). |

## 2. Additional Terms and Conditions

**2.a** The permittee shall ensure that the baghouse is operated with sufficient air volume to eliminate visible fugitive emissions from the rotary drum.

**2.b** All #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.

**2.c** All #4 fuel oil and #6 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.8%, by weight.

**2.d** Visible particulate emissions from the stack shall not exceed 20% opacity, as a 3-minute average.

**2.e** The permittee shall utilize best available control measures that are sufficient to minimize or eliminate visible particulate emissions (see section A.2.a).

**2.f** There shall be no visible fugitive particulate emissions from the enclosures for the aggregate elevator, vibrating screens, rotary drum, and weigh hopper.

**2.g** Visible fugitive particulate emissions (from areas other than the enclosures for the aggregate elevator, vibrating screens, rotary drum, and weigh hopper) shall be less than or equal to 10% opacity, as a 3-minute average.

**2.h** The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible fugitive particulate emissions from the aggregate storage bins.



C:\temp\permits3\8952.wpd

**2.i** The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize or eliminate the visible fugitve particulate emissions from conveyors and all transfer points to the dryer.

**2.j** 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.

On February 15, 2005, OAC rule 3745-23-06 was rescinded. However, that rule rescission 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 rescission of OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

**2.k** 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 8 inches of water while the emissions unit is in operation.

2. All used oil burned in this emissions unit shall be "on-specification used oil" in accordance with the definitions specified in 40 CFR Part 279 and OAC rule 3745-279-11. All on-specification used oil burned in this emissions unit shall meet the following specifications:

| Contaminants/Property | Allowable Specifications |
|---|---|
| arsenic | 5 ppm, maximum |
| cadmium | 2 ppm, maximum |
| chromium | 10 ppm, maximum |
| lead | 100 ppm, maximum |
| total halogens | 4000 ppm, maximum |



C:\temp\permits3\8952.wpd

| | |
|---|---|
| flash point | 100 degrees Fahrenheit, minimum |
| PCB's | 50 ppm, maximum |
| mercury | 1 ppm, maximum |
| heat content | 135,000 Btu/gallon, minimum |

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

Applicable standards for the burning of used oil containing polychlorinated biphenyls (PCBs)
are imposed by 40 CFR 761.20(e).

3. The permittee has requested a federally enforceable limit on asphalt produced in order to restrict the federally enforceable potential to emit. The total amount of asphalt produced is limited to 250,000 tons per rolling, 12-month period.

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 VOC, CO and NOx. See Section E.2.

5. The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 per cent, based on a monthly average of all aggregate materials.

6. The permittee shall only burn natural gas, #2 fuel oil, #4 fuel oil, #6 fuel oil and/or on-spec used oil in this emissions unit. In order to use a fuel, the permittee shall complete the emissions testing for that fuel as specified in Section E.1.a.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall receive a chemical analysis with each shipment of on-spec used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's U.S. EPA identification number, and the following information:

   a. date of shipment or delivery;

   b. quantity of on-spec used oil received;

   c. the Btu value of the on-spec used oil;

   d. the flash point of the on-spec used oil;



C:\temp\permits3\8952.wpd

e. the arsenic content, in ppm;

f. the cadmium content, in ppm;

g. the chromium content, in ppm;

h. the lead content, in ppm;

i. the PCB content, in ppm;

j. the total halogen content, in ppm; and

k. the mercury content, in ppm.

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 the facility, of any used oil stored at this facility, or of any used oil sampled at the emissions unit.

The permittee shall conduct or have performed an analysis of a representative sample of used oil from any used oil storage tank located at the facility on an annual basis. The analysis shall be performed to determine conformance with the contaminant specifications identified in Section B.2.

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:

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 #2 fuel oil, #4 fuel oil, #6 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 permittees or oil supplier's analyses for sulfur content and heat content.



C:\temp\permits3\8952.wpd

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible 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 vibrating screens, weigh hopper, the aggregate storage bins, the rotary drum and aggregate elevator/conveyors 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;

   d. the total duration of any visible emissions incident; and

   e. any corrective actions taken to minimize or eliminate the visible emissions.

7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from areas other than the enclosures for the aggregate elevator, vibrating screens, rotary drum, and weigh hopper serving this emissions unit. The presence or absence of any



C:\temp\permits3\8952.wpd

visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

8. 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 (as found in term F.2). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

9. The permit to install for this emissions unit 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: Heptane

TLV (mg/m3): 1,640



C:\temp\permits3\8952.wpd

Maximum Hourly Emission Rate (lbs/hr): 1.88



C:\temp\permits3\8952.wpd

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): less than 39,048

MAGLC (ug/m3): 39,048

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 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:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, 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”);

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 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) meet(s) the definition of a “modification” under other provisions of the rule, 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 still satisfy the “Air Toxic Policy:”

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



C:\temp\permits3\8952.wpd

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

c. 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 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, $SO_2$, NOx, 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 USEPA and the Ohio EPA in writing if on-specification used oil, which exceeds the specifications in Section B.2, is burned in this emissions unit. The notification shall include a copy of the on-specification used oil analysis and shall be sent to the USEPA and the Ohio EPA within 30 days of the exceedance.

6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of any 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 reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.



C:\temp\permits3\8952.wpd

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 vibrating screens, weigh hopper, the aggregate storage bins, the rotary drum and aggregate elevator/conveyors serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

9. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from areas other than the enclosures for the aggregate elevator, vibrating screens, rotary drum, and weigh hopper serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

10. 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.

11. Relocation of Portable Sources

    Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable source may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable source shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

    a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):

        i. the portable source is equipped with the best available technology for such portable source;

        ii. the portable source is operating pursuant to a currently effective PTI, permit to operate (PTO), or registration status;

        iii. the applicant has provided proper notice of the intent to relocate the portable source to the (1.) Ohio EPA District Office or local air agency responsible for the permit(s) for the source and (2.) 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



C:\temp\permits3\8952.wpd

iv. in the judgement of the Ohio EPA District Office or local air agency having jurisdiction over the new site, 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 source 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 source permittee possesses an Ohio EPA PTI, PTO or registration status;

ii. the portable source is equipped with best available technology;

iii. the portable source owner has identified the proposed site to Ohio EPA;

iv. Ohio EPA has determined that the portable source, 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 source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and

vii. the portable source 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 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 source must file a " Notice of Intent to Relocate" within the specified time frame (30 or 15 days), prior to the relocation of the portable source 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 portable 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 portable source may result in fines and civil penalties.



C:\temp\permits3\8952.wpd

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 emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitations: $NO_x$ emissions from burning natural gas shall not exceed 5.0 pounds per hour; $NO_x$ emissions from burning #2 fuel oil shall not exceed 9.2 pounds per hour; $NO_x$ emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 10.8 pounds per hour; $NO_x$ emissions from on-spec used oil shall not exceed 15.1 pounds per hour; $SO_2$ emissions from burning natural gas shall not exceed 2.2 pounds per hour; $SO_2$ emissions from burning #2 fuel oil shall not exceed 13.2 pounds per hour; $SO_2$ emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 22.0 pounds per hour; $SO_2$ emissions from burning on-spec used oil shall not exceed 20.2 pounds per hour; CO emissions from burning natural gas shall not exceed 22.0 pounds per hour; CO emissions from burning #2 fuel oil shall not exceed 23.6 pounds per hour; CO emissions from burning #4 fuel oil or #6 fuel oil shall not exceed 25.8 pounds per hour; CO emissions from burning on-spec used oil shall not exceed 23.2 pounds per hour; VOC emissions from burning natural gas, #2 fuel oil, #4 fuel oil, or #6 fuel oil shall not exceed 20.0 pounds per hour; VOC emissions from burning on-spec used oil shall not exceed 33.2 pounds per hour; PE from burning any approved fuel shall not exceed 0.04 gr/dscf.

      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 for the primary fuel but no later than 120 days after initial startup of the emissions unit. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel.

         Note: Emissions testing burning on-spec used oil was completed on October 5, 2004. No further testing with on-spec used oil is required by this PTI.

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NOx and $SO_2$.

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



C:\temp\permits3\8952.wpd

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 $SO_2$, 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 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 rule 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 Ohio EPA.

iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, #2 fuel oil, #4 fuel oil, or #6 fuel oil for PE, VOC, CO, NOx and $SO_2$ and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

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



C:\temp\permits3\8952.wpd

written report, where warranted, with prior approval from the Ohio EPA District Office or local air agency.

b. Emission Limitation: PE emissions shall not exceed 4.6 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 for each fuel, in pounds of PE per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

c. Emission Limitation: VOC emissions shall not exceed 20.8 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 for each fuel, in pounds of VOC per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

d. Emission Limitation: CO emissions shall not exceed 16.1 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 for each fuel, in pounds of CO per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

e. Emission Limitation: $SO_2$ emissions shall not exceed 13.8 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 for each fuel, in pounds of $SO_2$ per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.



C:\temp\permits3\8952.wpd

f. Emission Limitation: $NO_x$ emissions shall not exceed 9.4 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 for each fuel, in pounds of $NO_x$ per ton of asphalt produced, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by Section C.3 above), summing the results for all fuels, and dividing by 2000.

g. Emission Limitations: Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in Section B.2.

Applicable Compliance Method: Compliance with the emissions limitation for arsenic, cadmium and lead shall be demonstrated by the monitoring and record keeping in Section C.1 of this permit.

h. Emission Limitation: Visible particulate emissions from the stack shall not exceed 20% 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.

i. Emission Limitation: There shall be no visible fugitive particulate emissions from the enclosures for the aggregate elevator, vibrating screens, the rotary drum and weigh hopper.

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

j. Emission Limitation: Visible fugitive particulate emissions (from areas other than the enclosures for the aggregate elevator, vibrating screens, the rotary drum and weigh hopper) 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.



C:\temp\permits3\8952.wpd

k. Emission Limitation: Fugitive particulate emissions associated with the weigh hopper loading, aggregate transfer operations and sand transfer operations shall not exceed 1.3 tons of PE per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Fugitive emissions from the cold end are calculated as follows (AP-42, Table 11.12-2(10/01)):

Weigh hopper loading:

250,000 tons of material/year X 0.0051 lb PE/ton of material = 1275 lb PE/yr

Aggregate transfer:

150,000 tons of aggregate/year X 0.0069 lb PE/ton of aggregate = 1035 lb PE/yr

Sand transfer:

100,000 tons of sand/year X 0.0021 lb PE/ton of sand = 210 lb PE/yr

The sum of the above is 2520 lb PE/yr X 1 ton/2000 pounds = 1.3 tons of PE

l. Emissions Limitations: Fugitive emissions from load out operations shall not exceed 0.34 ton CO per rolling, 12-month period, 0. 13 ton PE per rolling, 12-month period, and 0.97 ton of VOC per rolling, 12-month period.
Emissions from silo filling operations shall not exceed 0.30 ton CO per rolling, 12-month period, 0.15 ton PE per rolling, 12-month period, and 3.0 tons VOC per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Fugitive emissions from the hot end (hot mix asphalt (HMA) load-out and silo filling) are calculated as follows (AP-42, Table 11.1-14 (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 (3/2004)) |
| For plant load-out, 7.3% of TOC is not VOC | (AP-42 Table 11.1-16 (3/2004)) |

| Activity | Pollutant | Predictive Emission Factor Equation, lb/ton |
|---|---|---|



C:\temp\permits3\8952.wpd

| | | |
|---|---|---|
| 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 | $EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$ |
| Load-out | VOC | $EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$ |
| 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 250,000 tons/yr production) |
|---|---|---|---|
| Silo filling | PE | $5.86 \times 10^{-4}$ | 0.07 |
| Load-out | PE | $5.22 \times 10^{-4}$ | 0.07 |
| Silo filling | VOC | $1.20 \times 10^{-2}$ | 1.5 |
| Load-out | VOC | $3.86 \times 10^{-3}$ | 0.48 |
| Silo filling | CO | $1.18 \times 10^{-3}$ | 0.15 |
| Load-out | CO | $1.35 \times 10^{-3}$ | 0.17 |

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 NOx, VOC, $O_2$ 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.



C:\temp\permits3\8952.wpd

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 Section E.1.a. The baselines shall be determined for VOC, NOx, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacture's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in Section 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 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 VOC, NOx, 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.



C:\temp\permits3\8952.wpd

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) |
|---|---|---|
| P901 | 200 TPH portable drum mix asphalt plant controlled with a baghouse | 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:

a. Construction date (no later than 30 days after such date);
b. Actual start-up date (within 15 days after such date); and
c. 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.



C:\temp\permits3\8952.wpd

2. Burner Tuning Form (see next page)

| BURNER TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS | |
|---|---|
| Facility ID: | Tuning Date: |
| Legal Name: | Other Company Name (if different than legal name): |
| Mailing Address: | Other Company Site Address: (if different than mailing address): |
| City, State, Zip Code: | Other Company City, County, Zip Code: |
| Site Contact Person: | Site Contact Telephone Number: |
| Site Contact Title: | Site Contact Fax Number: |
| Name of company performing tuning: | Name of company performing emission monitoring: |
| Type of plant (ie: batch, drum mix, etc.): | Calibration date for analyzers: |

Reason for Tuning: □ Season Initial Tuning □ June Tuning □ September Tuning □ Fuel Switch □ Other (describe)
_____

Fuel employed during tuning: □ Natural Gas □ #2 Fuel Oil □ #4 Fuel Oil □ Used Oil □ Other (describe)
_____

Tuning Results:

| Parameter | Recent Stack Test Pollutant Baseline Levels[1] | Results | |
|---|---|---|---|
| | | Pre Tuning | Post Tuning[3] |
| Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil) | | | |
| Fuel pressure (psi) | | | |
| For burners that require compressed air for proper operation, pressure at the burner (psi) | | | |
| Carbon Monoxide (CO) concentrations (ppm)[2] | | | |
| NOx concentrations (ppm)[2] | | | |
| Oxygen concentrations (%)[2] | | | |
| Volatile Organic Compound (VOC) conc. (ppm)[2] | | | |
| Asphalt Production (tons/hr) | | | |

[1]These values are based on the results of the most recent Ohio EPA approved emissions test.
[2] Specify whether on a dry or wet basis.
[3] If the burner did not require adjusting, please record N/A in the post tuning column.

Describe in detail a list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturers specifications. Use additional paper if necessary.


C:\temp\permits3\8952.wpd

Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

| | |
|---|---|
| Name of Official (Printed or Typed): | Title of Official and Phone Number: |
| Signature of Official: | Date: |


C:\temp\permits3\8952.wpd