



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
FRANKLIN COUNTY**

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 01-12215**

**Fac ID: 0125092371**

**DATE: 5/13/2008**

Marzane Inc  
Anthony Ruggiero  
3570 South River Road  
Zanesville, OH 43702

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

Sincerely,

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

CC: USEPA

CDO

MID-OHIO REG PLANNING COMM



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**Permit To Install  
Terms and Conditions**

**Issue Date: 5/13/2008  
Effective Date: 5/13/2008**

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**FINAL PERMIT TO INSTALL 01-12215**

Application Number: 01-12215  
Facility ID: 0125092371  
Permit Fee: **\$1250**  
Name of Facility: Marzane Inc  
Person to Contact: Anthony Ruggiero  
Address: 3570 South River Road  
Zanesville, OH 43702

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3200 Jackson Pike  
Columbus, Ohio**

Description of proposed emissions unit(s):  
**Multi fuel burner, dryer drum, mixing drum, air ducts, baghouse, aggregate conveyors, bucker elevators, aggregate bins, 4 silos, control tower.**

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

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Chris Korleski  
Director

**Marzane Inc**  
**PTI Application: 01-12215**  
**Issued: 5/13/2008**

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## **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 (i.e., postmarked) quarterly 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

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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)**

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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.

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**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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| NOx              | 15.9                 |
| CO               | 45.0                 |
| VOC              | 30.0                 |
| SO2              | 19.8                 |
| PM(stack)        | 5.87                 |

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|                 |       |
|-----------------|-------|
| PM-10(stack)    | 5.87  |
| PM(fugitive)    | 25.12 |
| PM-10(fugitive) | 9.53  |

**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 - (P901) - 500 TPH continuous mix asphalt plant with an Astec Phoenix Talon Low NOx Burner**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
|-------------------------------|---|

OAC rule 3745-31-05 (A)(3)

Carbon Monoxide (CO) emissions from burning on-spec used oil , number 2 fuel oil, or natural gas shall not exceed 0.15 pound per ton of asphalt produced.

Nitrogen Oxides (NO<sub>x</sub>) emissions from burning on-spec used oil, or number 2 fuel oil shall not exceed 0.053 pound per ton of asphalt produced.

NO<sub>x</sub> emissions from burning only natural gas shall not exceed 0.029 pound per ton of asphalt produced.

Sulfur Dioxide (SO<sub>2</sub>) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 0.066 pound per ton of asphalt produced.

SO<sub>2</sub> emissions from burning only natural gas shall not exceed 0.011 pound per ton of asphalt produced.

Volatile Organic Compound (VOC) emissions from burning on-spec used oil, number 2 fuel oil, or natural gas shall not exceed 0.10 pound per ton of asphalt produced.

Particulate emissions from the stack shall not exceed 0.030 gr/dscf.

PM-10 emissions from the stack shall not exceed 0.030 gr/dscf.

Emissions of fugitive PM-10 shall not exceed 9.53 pounds per hour.

Emissions of fugitive dust shall not exceed 25.12 pounds per hour.

Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in A.I.2.h below.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-21-08(B).

See A.I.2.a-i below.

|  |  |
|--|--|
| <p>OAC rule 3745-31-05(C)<br/>(To avoid PSD and Title V)</p>   | <p>Particulate emissions from the stack shall not exceed 5.87 tons per rolling 12-month period.</p> <p>PM-10 emissions from the stack shall not exceed 5.87 tons per rolling 12-month period.</p> <p>Emissions of fugitive dust shall not exceed 25.12 tons per rolling 12-month period.</p> <p>Emissions of fugitive PM-10 shall not exceed 9.53 tons per rolling 12-month period.</p> <p>VOC emissions shall not exceed 30.0 tons per rolling 12-month period.</p> <p>SO<sub>2</sub> emissions shall not exceed 19.8 tons per rolling 12-month period.</p> <p>NO<sub>x</sub> emissions shall not exceed 15.9 tons per rolling 12-month period.</p> <p>Fugitive emissions from drum mix load out operations (hot side) shall not exceed 1.25 tons VOC per rolling 12-month period and 0.41 ton CO per rolling 12-month period.</p> <p>Fugitive emissions from the silo filling operations (hot side) shall not exceed 3.66 tons VOC per rolling 12-month period and 0.35 ton CO per rolling 12-month period.</p> <p>CO stack emissions shall not exceed 45.0 tons per rolling 12-month period.</p> <p>See term B.3 below.</p> |
| <p>OAC rule 3745-21-08(B)</p>  | <p>See term A.I.2.i below.</p>   |
| <p>OAC rule 3745-17-07(A)(1)<br/>OAC rule 3745-17-11(B)(1)<br/>OAC rule 3745-17-07(B)<br/>OAC rule 3745-17-08<br/>OAC rule 3745-18-06(E)<br/>40 CFR Part 60, Subpart I</p> | <p>The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>  |

## 2. Additional Terms and Conditions

- 2.a** 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.
- 2.b** The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from all conveyors and all transfer points to the dryer.
- 2.c** There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- 2.d** Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10 percent opacity, as a 3-minute average.
- 2.e** Visible particulate emissions from the stack shall not exceed 10 percent opacity, as a 3-minute average.
- 2.f** 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 percent, by weight.
- 2.g** To avoid the requirement to obtain a PSD permit, as allowed by the USEPA's Injunctive Relief Policy, the following Best Available Control Technology (BACT) determination has been made by the Director: the permittee shall use dry low-NOx burners when firing any approved fuel in this emissions unit.
- 2.h** 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°F, minimum           |

\* 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

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4,000 ppm maximum) only if the permittee, prior to burning, has demonstrated to the Ohio EPA , Division of Hazardous Waste Management that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The used oil shall not exceed the following maximum PCB and mercury limitations nor fall below the following heating value:

|              |                             |
|--------------|-----------------------------|
| heat content | 135,000 Btu/gallon, minimum |
| PCB's        | 50 ppm, maximum             |
| mercury      | 1 ppm, maximum              |

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.

- 2.i** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 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. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until 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 baghouse shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.
2. The permittee shall not receive or burn any used oil which does not meet the specifications listed in A.I.2.h 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 maximum annual asphalt production rate for this emissions unit shall not exceed

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600,000 tons per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records for the current operational location such that first year, monthly asphalt production rate limits are not required.

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.
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 on an hourly basis. The permittee shall not substitute for the aggregate with materials such as shingles, slag, rubber, etc. without prior approval from Ohio EPA.
6. The permittee shall only burn natural gas, #2 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 as specified in Section E.1.a.

### **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall receive and maintain the results of the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit. These results 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/refiner, supplier, and/or marketer;
  - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC rule 3745-279-11, including the following:
    - i. arsenic content, in ppm;
    - ii. cadmium content, in ppm;
    - iii. chromium content, in ppm;
    - iv. the lead content, in ppm;
    - v. total halogens content, in ppm; and
    - vi. 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 paragraph 3745-279-63(B); and
  - e. the results of the analyses demonstrating that the used oil meets the heating

value and mercury and PCB limitations contained in this permit.

The metal contents for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a "Totals Analysis" or "Total Metals" testing methodology. Chapter Two of "Testing Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" should be referenced for selecting appropriate test methods for the used oil analyses. Under no circumstances shall the metal contents of the used oil be analyzed using "TCLP," "EP-TOC," or other similar testing procedures, since these tests were developed to gauge leachate mobility from a landfill, which is an irrelevant property of used oil burned for energy recovery.

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 Ohio EPA, Central District Office) 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 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 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 with each fuel type for each month;
  - c. the rolling, 12-month summations of the PE, PM-10, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emissions;
  - d. the rolling, 12-month summation of the total asphalt production; and
  - e. the maximum percentage of RAP used for any mix type.
4. For each shipment of number 2 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.

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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. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
  
6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator 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 location and color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to 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 emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) 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 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 form entitled "Burner Tuning Reporting Form for Asphalt Concrete Plants " (as found in term F. 3). An alternative form may be used upon approval of the Ohio EPA, Central District Office.
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). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Heptane

TLV (mg/m<sup>3</sup>): 1,640

Maximum Hourly Emission Rate (lbs/hr): 4.7

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 16.49

MAGLC (ug/m<sup>3</sup>): 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" shall not be satisfied, the permittee shall 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

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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.);
- 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 Conditions of this permit under section (A).
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month asphalt production limitation. These reports are

due by the dates described in Part I - General Terms and Conditions of this permit under section (A).

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the RAP usage limitation specified above. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A).
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month total PE, PM-10, 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).
5. The permittee shall notify the Ohio EPA, Division of Hazardous Waste Management and the Division of Air Pollution Control (Ohio EPA, Central District Office), 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 noncompliance with any other applicable requirement of OAC Chapter 3745-279; 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, exceeds the PCB limitation of 50 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 limitations specified above. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A).
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 eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from the enclosures for the rotary drum and/or the hot mix asphalt elevator serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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9. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from the areas other than the enclosures for the rotary drum and the hot mix asphalt elevator, and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the Ohio EPA, Central District Office 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 completed form entitled "*Burner Tuning Reporting Form for Asphalt Concrete Plants*" to the Ohio EPA, Central District Office to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 of each year and shall cover the previous calendar year.

## **E. Testing Requirements**

1. Compliance with the emission limitations in section A.I of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation: PE shall not exceed 0.030 gr/dscf; Carbon Monoxide (CO) emissions from burning on-spec used oil, number 2 fuel oil, or natural gas shall not exceed 0.15 pound per ton of asphalt produced; Nitrogen Oxides (NO<sub>x</sub>) emissions from burning on-spec used oil, or number 2 fuel oil shall not exceed 0.053 pound per ton of asphalt produced; NO<sub>x</sub> emissions from burning only natural gas shall not exceed 0.029 pound per ton of asphalt produced. Sulfur Dioxide (SO<sub>2</sub>) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 0.066 pound per ton of asphalt produced; SO<sub>2</sub> emissions from burning only natural gas shall not exceed 0.011 pound per ton of asphalt produced; Volatile Organic Compound (VOC) emissions from burning on-spec used oil, or number 2 fuel oil shall not exceed 0.10 pound per ton of asphalt produced.

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;
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub> for the primary fuel. Prior to secondary fuel emissions testing, the permittee

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shall consult the Ohio EPA, Central District Office to determine which pollutants should be tested;

- 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 NO<sub>x</sub>, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A

For SO<sub>2</sub>, 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 the Ohio EPA; and

- 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, or on-spec used oil for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub> and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office 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, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

- b. Emission Limitation: CO stack emissions shall not exceed 45.0 tons per rolling 12-month period.

Applicable Compliance Method: Compliance 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.

- c. Emission Limitation: PM-10 emissions from the stack shall not exceed 0.030 gr/dscf.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 201 and 202.

- d. Emissions Limitation: Particulate emissions from the stack shall not exceed 5.87 tons per rolling 12-month period.

Applicable Compliance Method: Compliance 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.

- e. Emission Limitation: VOC emissions shall not exceed 30.0 tons per rolling 12-month period.

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Applicable Compliance Method: Compliance 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.

- f. Emission Limitation: SO<sub>2</sub> emissions shall not exceed 19.8 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of SO<sub>2</sub> 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 Limitation: NO<sub>x</sub> emissions shall not exceed 15.9 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing for each fuel, in pounds of NO<sub>x</sub> 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.

- h. Emission Limitations: Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in A.I.2.h.

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

- i. Emission Limitation: Visible particulate emissions from the stack shall not exceed 10% 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, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- j. Emission Limitation: There shall be no visible emissions of fugitive dust from the enclosures for the hot aggregate elevator.

Applicable Compliance Method: Compliance with the limitation on visible emissions of fugitive dust found in Section A.I.1 of this permit shall be determined using Method 22 as set forth in 40 CFR Part 60, Appendix A, as such Appendix existed on July 1, 1996, and by the monitoring and record keeping in Section III.6.

- k. Emission Limitation: Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator) 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, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- l. Emissions Limitation: PM-10 emissions from the stack shall not exceed 5.87 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual allowable mass emission rate for PM-10 may be determined by multiplying an emission factor of 0.023 pounds of PM-10 per ton of asphalt produced by the emissions unit's rolling 12-month production rate and dividing by 2000 to obtain tons of PM-10 emissions. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.1, Table 11.1-3 (3/04).

- m. Emissions Limitation: Fugitive PM-10 emissions shall not exceed 9.53 tons per rolling 12-month period.

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

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

Fugitives emissions from the cold end are calculated as follows:

Material Loading (AP-42, Fifth edition, Table 11.12-2, 10/01):

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$((600,000 \text{ tons of material/year} \times 0.0024 \text{ lb PM-10/ton of material}) + (300,000 \text{ tons of aggregate/year} \times 0.0033 \text{ lb PM-10/ton of aggregate}) + (300,000 \text{ tons of sand/year} \times 0.00099 \text{ lb PM-10/ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 1.3 \text{ ton of PM-10/year}$

Screening (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(600,000 \text{ tons of material/year}) \times (0.0087 \text{ lb PM-10/ton of material}) = 2.61 \text{ tons PM-10/year}$

Transfer Points (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(600,000 \text{ tons of material/year}) \times (16 \text{ transfer points}) \times (0.0011 \text{ lb PM-10/ton of material}) = 5.28 \text{ tons of PM-10/year}$

Fugitives emissions from the hot end are calculated as follows:

Drum Mix Load-out (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor =  $0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)}$  = 0.000522 lb/ton asphalt

where,

V = asphalt volatility (-0.5)\*

T = HMA temperature (325°F)\*

\* Default values listed in AP-42

$(600,000 \text{ tons of asphalt produced}) \times (0.000522 \text{ lb of PM-10/ton of asphalt produced}) \times (1 \text{ ton}/2000 \text{ pounds}) = 0.16 \text{ ton of PM-10/ year}$

Silo Filling (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor =  $0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)}$  = 0.000586 lb/ton asphalt

where,

V = asphalt volatility (-0.5)\*

T = HMA temperature (325°F)\*

\* Default values listed in AP-42

$(600,000 \text{ tons of asphalt produced}) \times (0.000586 \text{ lb of PM-10/ton of asphalt})$

produced) X (1 ton/2000 pounds) = 0.18 ton of PM-10/year

Total maximum fugitive emissions are, therefore, 9.53 tons of PM-10/year.

- n. Emissions Limitation: Emissions of fugitive dust emissions shall not exceed 25.12 tons per rolling 12-month period.

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

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

Fugitives emissions from the cold end are calculated as follows:

Material Loading (AP-42, Fifth edition, Table 11.12-2, 10/01):

$((600,000 \text{ tons of material/year} \times 0.0051 \text{ lb PM/ton of material}) + (300,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM/ton of aggregate}) + (300,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM/ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 2.88 \text{ tons of PM/year}$

Screening (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(600,000 \text{ tons of material/year}) \times (0.025 \text{ lb PM/ton of material}) = 7.5 \text{ tons PM/year}$

Transfer Points (AP-42, Fifth edition, Table 11.19.2-2, 08/04):

$(600,000 \text{ tons of material/year}) \times (16 \text{ transfer points}) \times (0.0030 \text{ lb PM/ton of material}) = 14.4 \text{ tons of PM/year}$

Fugitives emissions from the hot end are calculated as follows:

Drum Mix Load-out (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor =  $0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)} = 0.000522 \text{ lb/ton asphalt}$

where,

V = asphalt volatility (- 0.5)\*

T = HMA temperature (325°F)\*

\* Default values listed in AP-42

(600,000 tons of asphalt produced X 0.000522 lb of PM/ton of asphalt produced) X ( 1 ton/2000 pounds) = 0.16 ton of PM.

Silo Filling (AP-42, Fifth edition, Table 11.1-14, 03/04):

Emission factor =  $0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)}$  = 0.000586 lb/ton asphalt

where,

V = asphalt volatility (- 0.5)\*

T = HMA temperature (325°F)\*

\* Default values listed in AP-42

(600,000 tons of asphalt produced X 0.000586 lb of PM/ton of asphalt produced) X ( 1 ton/2000 pounds) = 0.18 ton of PM/year

Total maximum fugitive emissions are, therefore, 25.12 tons of PM/year.

- o. Emission Limitation: Emissions of fugitive PM-10 shall not exceed 9.53 pounds per hour.

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

$9.53 \text{ PM-10/ yr} \times 2000 \text{ lbs/ ton} \times 1\text{yr}/2000 \text{ hours} = 9.53 \text{ PM-10/hr}$

- p. Emission Limitations: Emissions of fugitive dust shall not exceed 25.12 pounds per hour.

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

$25.12 \text{ ton PM/ yr} \times 2000 \text{ lbs/ ton} \times 1\text{yr}/2000 \text{ hours} = 25.12 \text{ lb PM/hr}$

- q. Emission Limitation: Fugitive emissions from drum mix load out operations (hot side) shall not exceed 1.04 tons VOC per rolling 12-month period and 0.34 ton CO per rolling 12-month period. Fugitive emissions from the silo filling

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operations (hot side) shall not exceed 3.05 tons VOC per rolling 12-month period and 0.30 ton CO per rolling 12-month period.

Applicable Compliance Method: Compliance with these emission limitations shall be assumed based upon the following worst case calculations.

Fugitive emissions from the hot side load out and silo filling operations are calculated based on the following emission factors from AP-42, Fifth Edition, Table 11.1-14, 03/04:

| Activity     | Pollutant | Predictive Emission Factor Equation (lb/ton)    |
|--------------|-----------|---|
| Load-out     | VOC**     | $EF = 0.0172 (-V)e^{((0.251)(T+460) - 20.43)}$  |
| Silo Filling | VOC**     | $EF = 0.0504 (-V)e^{((0.251)(T+460) - 20.43)}$  |
| Load-out     | CO        | $EF = 0.00558 (-V)e^{((0.251)(T+460) - 20.43)}$ |
| Silo Filling | CO        | $EF = 0.00488 (-V)e^{((0.251)(T+460) - 20.43)}$ |

where,

V = asphalt volatility (-0.5)\*  
 T = HMA temperature (325°F)\*

\* Default values listed in AP

\*\* Assumes VOC = TOC

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

| Activity     | Pollutant | EF, in lb/ton production) | tons/year (at 600,000 tons/yr production) |
|--------------|-----------|---------------------------|---|
| Load-out     | VOC*      | $4.16 \times 10^{-3}$     | 1.25                                      |
| Silo Filling | VOC*      | $1.22 \times 10^{-2}$     | 3.66                                      |
| Load-out     | CO        | $1.35 \times 10^{-3}$     | 0.41                                      |
| Silo Filling | CO        | $1.18 \times 10^{-3}$     | 0.35                                      |

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 concentrations 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 accurately 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 Ohio EPA- approved emissions testing that demonstrated Emissions Unit P901 was in compliance with all applicable emission limitations as described in term A.1. 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. The concentrations of NO<sub>x</sub> and CO measured by the portable monitor shall be comparable to the concentrations measured by the USEPA reference methods. Record these values on the form entitled "Burner Tuning Reporting Form for Asphalt Concrete Plants" (as found in Section F.3) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be subsequently 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 manufacturer'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 form entitled "Burner Tuning Reporting Form for Asphalt Concrete Plants".
- 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. In such case, 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 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post-Tuning" results column on the form entitled "Burner Tuning Reporting Form for Asphalt Concrete Plants".
  - vi. By January 31 of each year, submit copies of all Burner Tuning Reporting Form for Asphalt Concrete Plants forms produced during the past calendar year to the Ohio EPA, Central District Office.
- e. Burner Tuning Frequency

Except for calendar year 2008, 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 1 of each year and within 10 production days before or after September 1 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. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

- f. During calendar year 2008, the permittee shall conduct the burner tuning procedure within (10) production days before or after July 1 and within ten (10) production days before or after September 1. A burner tuning is not required if the production season ends prior to the associated tuning due date.

F. Miscellaneous Requirements

- 1. The following source is subject to the applicable provisions 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          | 500 tph 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:

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

Reports are to be sent to:

Central District Office  
Division of Air Pollution Control  
50 West Town Street  
Columbus, OH 43215

- 2. All of the terms and conditions of this PTI are federally enforceable, except the terms concerning the application of the "Air Toxic Policy".
- 3. This PTI replaces Air Permit to Install 01-7353, issued June 18, 1998.
- 4. Burner Tuning Form (see next page)

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|  |  |
|--|--|
| 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 <sup>1</sup> | Results    |                          |
|--|--|------------|--------------------------|
|  |  | Pre-Tuning | Post-Tuning <sup>3</sup> |
| 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) <sup>2</sup>                                     |  |            |                          |
| NOx concentrations (ppm) <sup>2</sup>  |  |            |                          |
| Oxygen concentrations (%) <sup>2</sup>   |  |            |                          |
| Asphalt Production (tons/hr)   |  |            |                          |

<sup>1</sup>These values are based on the results of the most recent Ohio EPA approved emissions test.

<sup>2</sup> Specify whether on a dry or wet basis.

<sup>3</sup> If the burner did not require adjusting, please record N/A in the post-tuning column.

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

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Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, and comply fully with applicable State requirements; and it 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:                               |

Marzane Inc  
PTI Application Number: 01-12215

Facility ID: 0125092371

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SIC CODE 2951 SCC CODE 3-05-002-55 EMISSIONS UNIT ID P901  
 EMISSIONS UNIT DESCRIPTION 500 TPH continuous mix asphalt plant controlled by a baghouse  
 DATE INSTALLED 4/2008

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

| Pollutants         | Air Quality Description | Actual Emissions Rate                      |                              | PTI Allowable                       |                              |
|--------------------|-------------------------|--|------------------------------|-------------------------------------|------------------------------|
|                    |                         | Short Term Rate                            | Tons Per Year                | Short Term Rate                     | Tons Per Year                |
| Particulate Matter | attainment              | 0.03 gr/dscf                               | 5.87 stack<br>25.12 fugitive | 0.03 gr/dscf                        | 5.87 stack<br>25.12 fugitive |
| PM <sub>10</sub>   | non attainment          | 0.03 gr/dscf                               | 5.87 stack<br>9.53 fugitive  | 0.03 gr/dscf                        | 5.87 stack<br>9.53 fugitive  |
| Sulfur Dioxide     | attainment              | .011 lb/ton gas<br>0.066 lb/ton #2 or used | 19.8                         | .066 lb/ton                         | 19.8                         |
| Organic Compounds  | non attainment          | 0.1 lb/ton                                 | 30.0                         | 0.1 lb/ton                          | 30.0                         |
| Nitrogen Oxides    | non attainment          | 0.53 lb/ton oil<br>0.029 lb/ton gas        | 15.9                         | 0.53 lb/ton oil<br>0.029 lb/ton gas | 15.9                         |
| Carbon Monoxide    | attainment              | 0.15 lb CO/ton                             | 45.0                         | 0.15 lb CO/ton                      | 45.0                         |
| Lead               |                         |  |                              |                                     |                              |
| Other: Air Toxics  |                         |  |                              |                                     |                              |

APPLICABLE FEDERAL RULES:

NSPS? I

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

**Enter Determination** Compliance w/ the permitted emissions limits and applicable rules; use of lo NOx burner.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ unknown

### **TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_