



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL  
TRUMBULL COUNTY**

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 02-20309**

**Fac ID: 0278080443**

**DATE:** 3/24/2005

Mar-Zane, Inc. Plant 27  
Ronald P. Morrison  
PO Box 1585  
Zanesville, OH 43701

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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. 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, Ohio 43215

Sincerely,

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

CC: USEPA

NEDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 3/24/2005  
Effective Date: 3/24/2005**

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**FINAL PERMIT TO INSTALL 02-20309**

Application Number: 02-20309  
Facility ID: 0278080443  
Permit Fee: **\$1350**  
Name of Facility: Mar-Zane, Inc. Plant 27  
Person to Contact: Ronald P. Morrison  
Address: PO Box 1585  
Zanesville, OH 43701

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1721 Pine Ave., SE  
Warren, Ohio**

Description of proposed emissions unit(s):  
**To add slag as a raw material in the asphalt manufacture process.**

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 record keeping 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 record keeping 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.

Mar-Zane, Inc. Plant 27  
 PTI Application: 02-20309  
 Issued: 3/24/2005

Facility ID: 0278080443

#### 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>
PE	14.5
PM <sub>10</sub>	10.48
SO <sub>2</sub>	24.97
NO <sub>x</sub>	8.25
CO	51.3
VOC	26.55

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
F001 - Plant roadways and parking areas	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-07 (B)(5)
		OAC rule 3745-17-08 (B), (B)(2)
Paved roadways and parking areas (see Section A.2.a)	OAC rule 3745-31-05 (A)(3)	
	OAC rule 3745-17-07 (B)(4)	
	OAC rule 3745-17-08 (B), (B)(8), (B)(9)	
Unpaved roadways and parking areas (see Section A.2.b)	OAC rule 3745-31-05 (A)(3)	

Mar-2

PTI A

Issued: 3/24/2005

Emissions Unit ID: F001

Applicable Emissions  
Limitations/Control Measures

PE: 0.74 ton of fugitive particulate emissions per year

PM<sub>10</sub>: 0.08 ton of fugitive PM<sub>10</sub> emission per year

No visible particulate emissions except for one minute during any 60-minute period

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, A.2.d, and A.2.f through A.2.j)

Less stringent than the above-mentioned visible emission limitation

Less stringent than the above-mentioned control measure requirements

No visible particulate emissions except for 3 minutes during any 60-minute period

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.e through A.2.j)

Less stringent than the above-mentioned visible emission limitation

Less stringent than the above-mentioned control measure requirements

**2. Additional Terms and Conditions**

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

all paved roadways

paved parking areas:

all paved parking areas

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

all unpaved roadways

unpaved parking areas:

all unpaved parking areas

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.e** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable

requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

## **B. Operational Restrictions**

None

### C. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
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all paved roadways and parking areas once during each day of operation

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
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all unpaved roadways and parking areas once during each day of operation

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. The dates the control measures were implemented; and
  - d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking

Emissions Unit ID: **F001**

areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

Compliance with the emission limitations in Section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1. Emission Limitation:

0.70 ton of fugitive PE per year

Applicable Compliance Method:

This emission limitation was developed by applying a 75% and 90% control efficiency on unpaved and paved roadways to a maximum potential uncontrolled emission rate of 0.98 TPY fugitive PE. The maximum potential uncontrolled emission rate was calculated using AP-42 emission factors for paved and unpaved roadways [section 13.2.1. (12/03) and section 13.2.2. (12/03)] and the following maximum vehicle miles traveled:

paved roadways - 6,960 miles  
 unpaved roadways - 3,333 miles

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed

2. Emission Limitation:

0.08 ton of fugitive PM<sub>10</sub> per year

**Applicable Compliance Method:**

This emission limitation was developed by applying a 75% and 90% control efficiency on unpaved and paved roadways to a maximum potential uncontrolled emission rate of 0.16 TPY fugitive PM<sub>10</sub>. The maximum potential uncontrolled emission rate was calculated using AP-42 emission factors for paved and unpaved roadways [section 13.2.1. (12/03) and section 13.2.2. (12/03)] and the following maximum vehicle miles traveled:

paved roadways - 6,960 miles  
unpaved roadways - 3,333 miles

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed

3. Compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above 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, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

None

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

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

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Load-in and load-out of storage (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	No visible emissions except for one minute in any hour  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f)
Wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	No visible emissions except for one minute in any hour  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d, through A.2.f)
Load-in and load-out of storage piles, and wind erosion from storage piles	OAC rule 3745-31-05(A)(3)	PE: 2.20 tpy PM <sub>10</sub> : 1.82 tpy
	OAC rule 3745-17-07 (B)(6)	Less stringent than the above-mentioned visible emission limitation
	OAC rule 3745-17-08 (B),(B)(6)	Less stringent than the above-mentioned visible emission

limitation

## 2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

- Limestone storage piles
- Gravel storage piles
- Natural Sand storage piles
- Recycled asphalt storage piles
- Slag aggregate storage piles
- All other storage piles at the facility

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimize drop height for load-in and load-out operations to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee maintains that the inherent moisture content of the materials is at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the

permittee shall employ best available control measures to ensure compliance.

- 2.e The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

**B. Operational Restrictions**

None

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

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	weekly

- 2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	weekly

- 3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identificationminimum wind erosion inspection frequency

all

weekly

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
  - a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. The dates the control measures were implemented; and,
  - d. On a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar

quarter basis within 30 days after the end of each calendar quarter.

#### D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and,
  - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### E. Testing Requirements

1. Emission limitation:

2.20 tons of PE per year

Applicable compliance method:

Compliance can be determined by the following equations:

$$Er = [ 2A*B + C*D*F ] [ 1 \text{ ton}/2000 \text{ lbs} ]$$

Where:

Er = particulate matter emission rate in tons per year.

A = emission factor for drop batch operation: (AP-42, section 13.2.4-3, January '95 version)

$$E = k(0.0032)[(U/5)^{1.3} / (M/2)^{1.4}]$$

Where E = emission factor (lbs/ton)

k = particular size multiplier

U = mean wind speed (mph)

M = material moisture content (%)

B = annual 12-month summation of sand, gravel, and sandstone produced

C = emission factor for wind erosion: (Using AP-42, Section 11.2.3, Eq (3)) (May, '83 version)

$$E = 1.7 (s/1.5)[(365-p)/235](f/15) \text{ (lb/day/acre)}$$

Where:

E = total suspended particulate emission factor (lb/day/acre)

s = silt content of aggregate (%) (9%)

p = number of days with > or = to 0.25 mm (0.01 in.) of precipitation per year (197 days)

f = percentage of time that the unobstructed wind speed exceeds 5.4 m/s (12 mph) at the mean pile height. (Assume 40%)

D = number of days in a year, 365 days

F = number of acres of storage piles, 2.0 acres

2. Emission limitation:

1.82 tons of PM<sub>10</sub> per year

Applicable compliance method:

Compliance can be determined by the following equations:

$$E_r = [2A*B + C*D*F] [1 \text{ ton}/2000 \text{ lbs}]$$

Where:

E<sub>r</sub> = particulate matter emission rate in tons per year.

A = emission factor for drop batch operation: (AP-42, section 13.2.4-3, January '95 version)

$$E = k(0.0032)[(U/5)^{1.3} / (M/2)^{1.4}]$$

Where E = emission factor (lbs/ton)

k = particular size multiplier, 0.35 (<10 μ m)

U = mean wind speed (mph), 8.5 mph

M = material moisture content (%)

B = annual 12-month summation of sand, gravel, and sandstone produced

C = emission factor for wind erosion: (Using AP-42, Section 11.2.3, Eq (3)) (May, '83 version)

$$E = 1.7 (s/1.5)[(365-p)/235](f/15) \text{ (lb/day/acre)}$$

Where:

E = total suspended particulate emission factor (lb/day/acre)

s = silt content of aggregate (%) (9%)

p = number of days with > or = to 0.25 mm (0.01 in.) of precipitation per year

(197 days)

f = percentage of time that the unobstructed wind speed exceeds 5.4 m/s (12 mph) at the mean pile height. (Assume 40%)

D = number of days in a year, 365 days

F = number of acres of storage piles, 2.0 acres

**3.** Emission limitation:

One (1) minute of visible emission

Compliance with the visible emission limitation for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standard of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

None

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Material Handling Operations	OAC rule 3745-31-05(A)(3)	PE: 5.99 tpy PM <sub>10</sub> : 3.01 tpy  VE: 10 percent opacity, as a three-minute average  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Section A.2.b through A.2.d)
	OAC rule 3745-17-07 (B)(1)	Less stringent than, or equal in stringency to, the above-mentioned visible emission limitation
	OAC rule 3745-17-08 (B)	Less stringent than the above-mentioned control measure requirements

**2. Additional Terms and Conditions**

- 2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Aggregate handling by front-end loaders  
Aggregate cold feed bins to conveyor lines

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Conveyor to aggregate scalping screen  
Aggregate conveyor to stacker

Recycled asphalt pavement (RAP) handling by front-end loaders  
 Recycled asphalt pavement (RAP) feed bins to conveyor line  
 Conveyor to recycled asphalt pavement (RAP) scalping screen  
 Recycled asphalt pavement (RAP) conveyor to stacker

**2.b** The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application the permittee has committed to perform the following control measure(s) to ensure compliance:

material handling operation(s)

Aggregate handling by front-end loaders

by front-end loaders

Aggregate cold feed bins to conveyor line

Recycled asphalt pavement (RAP) feed bins to conveyor line

Conveyor to aggregate scalping screen

Conveyor to recycled asphalt pavement (RAP) scalping screen

Aggregate conveyor to stacker

Recycled asphalt pavement (RAP) conveyor to stacker

Recycled asphalt pavement (RAP) handling

control measure(s)

use only aggregate material with inherently high moisture content or employ dust suppressant and minimize drop height distance from front-end loader(s) to truck beds, stock piles, and/or aggregate cold feed bins

use only aggregate material with inherently high moisture content or employ dust suppressant to control dust emissions during subsequent aggregate handling

use only aggregate material with inherently high moisture content or employ dust suppressant to control dust emissions during subsequent aggregate handling

use only aggregate material with inherently high moisture content or employ dust suppressant to control dust emissions during subsequent aggregate handling and minimize drop height distance

use only RAP material with inherently high moisture content or employ dust suppressant and minimize drop height distance from front-end loaders(s) to truck beds, stock piles, and/or aggregate cold feed bins

use only RAP material with inherently high moisture content or employ dust suppressant to control dust emissions during subsequent aggregate handling

use only RAP material with inherently high moisture content or employ dust suppressant to control dust emission during subsequent

aggregate handling

use only RAP material with inherently high moisture content or employ dust suppressant to control dust emissions during subsequent aggregate handling and minimize drop height distance

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Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-31-05.

**B. Operational Restrictions**

None

### C. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
Aggregate material unloading	daily
Aggregate material unloading from trucks	daily
Aggregate handling by front-end loaders	daily
Aggregate cold feed bins to conveyor line	daily
Conveyor to aggregate scalping screen	daily
Aggregate conveyor to stacker	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office of local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
- The date and reason any required inspection was not performed;
  - The date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - The dates the control measure(s) was (were) implemented; and,
  - On a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

### D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. Each day during which an inspection was not performed by the required frequency; and,
  - b. Each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### E. Testing Requirements

1. Emission limitation:

5.99 tons of PE per year

Applicable compliance method:

Compliance shall be determine by the following equation:

$$E_r = [A + 2.1 * C * D] / 2000 \text{ lbs}$$

Where:

$E_r$  = Emission rate, in tons per year

A = calculated fugitive particulate emission rate using AP-42 emission factor equation for material handling (section 13.2.4. (1/95 version)), 1.26 tpy. The calculated particulate emission rate was determined by calculating the PE from each transfer point, as specified on the permit application.

2.1 = multiplying factor to convert to PE form PM10

C = maximum annual asphalt production, 300,000 tons

D = AP-42 emission factor, 0.015 lb of PM10/ton (Table 11.19.2-2, 1/95 version)

2. Emission limitation:

3.01 tons of PM<sub>10</sub> per year

Applicable compliance method:

Compliance shall be determine by the following equation:

$$E_r = [A + C * D] / 2000 \text{ lbs}$$

Where:

Er = Emission rate, in tons per year

A = calculated fugitive PM10 emission rate using AP-42 emission factor equation for material handling (section 13.2.4. (1/95 version)), 0.76 tpy. The calculated particulate emission rate was determined by calculating the PE from each transfer point, as specified on the permit application.

C = maximum annual asphalt production, 300,000 tons

D = AP-42 emission factor, 0.015 lb of PM10/ton (Table 11.19.2-2, 1/95 version)

**3.** Emission limitation:

10 percent opacity, as a three-minute average

Compliance with the visible emission limitation for the material handling operation(s) identified above 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.

**F. Miscellaneous Requirements**

None

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P901- 300 ton per hour drum-mix asphalt plant, equipped with a fabric filter baghouse. Modification of P901 to add fuel oils/used oil.  This plant is derated to 265 TPH while producing slag mixes.  The terms and conditions of this PTI supercede those of PTI 02-18481, issued on March 16, 2004.	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-11 (B)  OAC rule 3745-17-07(A)  OAC rule 3745-17-07 (B)
	OAC rule 3745-31-05 (C)	
	40 CFR Part 60, Subpart I	

Applicable Emissions  
Limitations/Control Measures

PE/PM<sub>10</sub>: 11.14 lbs/hr, 5.57 tpy  
OC: 53.10 lbs/hr, 26.55 tpy  
NO<sub>x</sub>: 16.50 lbs/hr, 8.25 tpy  
CO: 102.60 lbs/hr, 51.3 tpy  
SO<sub>2</sub>: 97.52 lbs/hr for slag mixes,  
12.30 lbs/hr for non-slag mixes  
24.97 tpy

See A.2.a

See A.2.f.

CO: 51.3 tons per rolling 12-month  
period  
SO<sub>2</sub>: 24.97 tons per rolling  
12-month period  
OC: 26.55 tons per rolling  
12-month period  
PE/PM<sub>10</sub>: 5.57 tons per rolling  
12-month period

0.04 gr PE/dscf of exhaust gas

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

See A.2.d.

See A.2.g.

See A.2.c.

**2. Additional Terms and Conditions**

**2.a** "Best Available Technology" (BAT) control requirements for this emissions unit has been

determined to be the following:

- i. Use of baghouse for PE control of drum mix operations. The baghouse control system exhaust shall meet the requirements of 40 CFR Part 60, Subpart I (0.04 gr PE/dscf of exhaust gas) and shall achieve a 100% capture efficiency;
  - ii. Use of best available control measures (see A.2.b)
- 2.b** The permittee shall employ best available control measures to minimize or eliminate visible emissions of fugitive dust from the material handling operations (See A.2.c) associated with emissions unit P901. In accordance with the permit application, the permittee maintains that the inherent moisture content of the materials is at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available control measures to ensure compliance.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** Visible fugitive particulate emissions from material handling operations for emissions unit P901 shall not exceed the following opacity restrictions:

<b>Emission Point (company ID)</b>	<b>Equipment Type</b>	<b>Opacity Limit as a three-Minute Average</b>	<b>Regulatory Basis for Limit</b>
material unloading into feeder bins	transfer point	20%	OAC Rule 3745-17-07(B)
material transfer from feeder bin conveyor to dryer feed conveyor	transfer point	20%	OAC Rule 3745-17-07(B)
material transfer from dryer feed conveyor to dryer	transfer point	20%	OAC Rule 3745-17-07(B)

- 2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.e** The requirements established pursuant to this rule are less stringent than, or equal in stringency to, the control measure requirements in section A.2.b.

- 2.f The requirements of this rule also include compliance with 40 CFR Part 60, Subpart I, OAC rule 3745-31-05(C), and OAC rule 3745-17-07(B).
- 2.g The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.
- 2.h The permittee has satisfied the "latest available control techniques and operating practices required pursuant to OAC rule 3745-21-07 (B) and 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.

**B. Operational Restrictions**

- 1. Annual asphalt production from emissions unit P901 shall not exceed 300,000 tons per year, based on a rolling, 12 month summation of the monthly production rates.

The combination of slag and non-slag asphalt produced may not cause annual emissions of total SO<sub>2</sub> to exceed 24.97 tons based on a rolling, 12-month summation and calculated using the following equation:

$$T = [(0.368 \text{ lb/ton} \times S) + (0.041 \text{ lb/ton} \times N)] / 2,000 \text{ lbs/ton}$$

where,

- T = total annual SO<sub>2</sub> emissions in TPY,
- 0.368 lb/ton = emission factor for slag mixes,
- S = total slag mix produced for each rolling, 12-month period,
- 0.041 lb/ton = emission factor for non-slag mixes,
- N = total non-slag mix produced for each rolling, 12-month period.

To ensure enforceability during the first 12 calendar months of operation under the provisions of this permit, the permittee shall not exceed the production levels and emission limits specified in the following table:

<u>MONTH(s)</u>	<u>MAXIMUM ALLOWABLE CUMULATIVE ASPHALT PRODUCTION</u>	<u>MAXIMUM ALLOWABLE ANNUAL EMISSIONs OF SO<sub>2</sub> (TPY)</u>
1	50,000	4.16
1 - 2	100,000	8.32
1 - 3	150,000	12.48

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1 - 4	200,000	16.64
1 - 5	250,000	20.8
1 - 6	300,000	24.97
1 - 7	300,000	24.97
1 - 8	300,000	24.97
1 - 9	300,000	24.97
1 - 10	300,000	24.97
1 - 11	300,000	24.97
1 - 12	300,000	24.97

After the first 12 calendar months of operation under the provisions of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates and compliance with the annual emission limitation shall be based upon a rolling, 12-month summation of the monthly emission rates.

- The permittee may substitute recycled asphalt aggregates in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials introduced at any given time.
- The permittee shall only employ materials/fuels listed in the permit to install application. Any changes in the materials employed/combusted may be deemed a "modification" to the emissions unit and, as such will require prior notification to and approval from the Ohio EPA, Division of Air Pollution Control, Northeast District Office.
- 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
- All recycled, used oil burned in emissions unit P901 shall meet the following specifications:

Contaminant/Property Allowable Specifications

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

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

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

6. The permittee may not burn any used oil which does not meet the specifications listed in OAC rule 3745-279-11 without first obtaining an air permit to install that authorizes the burning of such used oil. The burning of used oil that does not meet specifications listed in OAC rule 3745-279-11 is subject to OAC rule 3745-279-60 through 67 and the applicable portions of 40 CFR part 761. In addition, if the permittee is burning used oil which exceed the mercury limitation and falls below the heat content limitation listed in term B.f, then this may trigger the requirement to apply for and obtain an air permit to install.
7. The burning of hazardous waste is prohibited without first complying with all applicable state and federal hazardous waste and air regulations and permits.
8. The permittee shall conduct burner performance tuning for purposes of minimizing emissions. Burner performance tuning shall contain at a minimum the evaluation of and adjustment to manufacturer's specifications of the following:
  - i. Fuel flow to the burner (for fuel oil and on spec used oil);
  - ii. Differential pressure of the baghouse to ensure proper air flow through the plant;
  - iii. Flue gas analysis (of gases present in the drum and or stack) for CO, O<sub>2</sub>, CO<sub>2</sub>, and NO<sub>x</sub>;
  - iv. Fuel pressure; and
  - v. For burners that require compressed air for proper operation, correct pressure at the burner;
9. The permittee shall conduct an initial burner tuning within 30 production days after commencement of the production season. The permittee shall conduct another burner tuning within the time period of 90 to 120 production days after the initial burner tuning. 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.

10. In addition to the burner tuning required above, the permittee shall conduct additional burner tuning, within 30 production days, for each type of fuel burned during the production season that is different than the fuel(s) burned during the initial burner tuning or the burner tuning described above that occurs 90 to 120 production days after the initial burner tuning.

### C. Monitoring and/or Record keeping Requirements

1. The permittee shall install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. Except as otherwise provided in this section, the permittee shall perform inspections of the fugitive material handling operations in accordance with the following frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
all material unloading into feeder bins	once during each day of operation
all material transfer from feeder bin conveyor to dryer feed conveyor	once during each day of operation
all material transfer from dryer feed conveyor to dryer	once during each day of operation
3. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during times of asphaltic concrete production.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain records of the following information:
  - a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

- b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. The dates the control measures were implemented.
6. The permittee shall maintain daily records of the following:
  - a. Total slag mix asphalt production, in tons per day.
  - b. Total non-slag mix asphalt production, in tons per day.
  - c. Total production hours while producing slag mix, in hours per day.
  - d. Total production hours while producing non-slag mix, in hours per day.
  - e. Average hourly slag mix production, in tons per hour (a divided by c).
  - f. Average hourly non-slag mix production, in tons per hour (b divided by d).
7. The permittee shall maintain monthly records of the following information:
  - a. The total asphalt production rate and slag mix and non-slag mix production rates, in tons per month.
  - b. Beginning after the first 12 calendar months of operation under the provisions of this permit, the rolling, 12-month summations of the monthly total asphalt production rate, slag mix and non-slag mix production rates.  
  
Beginning after the first 12 calendar months of operation under the provisions of this permit, the rolling, 12-month summations of the monthly total SO<sub>2</sub> emission rates using the equation specified in section B.1. above.  
  
Also, during the first 12 calendar months of operation under the provisions of this permit, the permittee shall record the cumulative total asphalt production rates for each calendar month, as well as the cumulative total SO<sub>2</sub> emissions for each calendar month.
8. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
  - a. The date of the shipment or delivery.

- b. The quantity of used oil received.
- c. The Btu value of the used oil, in Btu/gallon.
- d. The flash point of the used oil, in Btu/gallon.
- 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.
- k. The mercury content, in ppm.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analysis through an independent laboratory or any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

- 9. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
- 10. For each shipment of 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 analysis for sulfur content and heat content.

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11. The permittee shall properly operate and maintain portable devices to monitor the concentration of NO<sub>x</sub>, CO, O<sub>2</sub>, and CO<sub>2</sub> present in the flue gases generated within the drum and/or stack during the burner performance tuning. 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.
12. While performing the required burner tuning, the permittee shall record the following information:
  - a. Date of the burner tuning;
  - b. Results of the evaluation of the operating parameters listed above in A.2.e;
  - c. Detail list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturer's specifications; and
  - d. Type of fuel(s) employed during the burner tuning.

#### D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month asphalt production restriction and emission limitation and for the first 12 calendar months of operation under the provisions of this permit, all exceedances of the maximum allowable emission limit and cumulative asphalt production levels.
3. The permittee shall submit deviation reports that identify any of the following occurrence:
  - a. Each day during which an inspection was not performed by the required frequency; and
  - b. Each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
4. Deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
5. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11 and the applicable portions of 40 CFR part 761 and shall also notify Ohio EPA if any used oil exceed the mercury limitation and falls below the

heat content limitation listed in term B.4 within thirty days after the exceedance occurs. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11 and the applicable portions of 40 CFR part 761, the permittee is subject to that rule and must comply with all applicable provisions of that rule(s).

6. The permittee shall submit burner tuning reports to the Ohio EPA, Northeast District Office that summarize the results of each burner tuning. These reports are due within 30 days of the date that the burner tuning was performed.

## E. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:  
0.04 gr PE/dscf of exhaust gas, 11.14 lbs of PE/PM<sub>10</sub> per hour;

Applicable Compliance Method:  
Compliance shall be determined by testing requirements specified in section E.2.

- b. Emission Limitation:  
5.57 tons of PE/PM<sub>10</sub> per rolling 12-month period

Applicable Compliance Method:  
The emission limitation was established by multiplying the maximum rolling 12-month asphalt production rate of 300,000 tons by an emission factor of 0.0371 lb/ton divided by 300 TPH) and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual asphalt production rate, compliance with the emission limitation per rolling 12-month period will be assumed. Compliance with the rolling 12-month asphalt production rate shall be demonstrated by the monitoring and recordkeeping in Section C.6.

- c. Emission Limitation:  
97.52 pounds sulfur dioxide (SO<sub>2</sub>) per hour for slag mixes  
12.30 pounds SO<sub>2</sub> per hour for non-slag mixes

Applicable Compliance Method:  
Compliance shall be determined by testing requirements specified in section E.2.

- d. Emission Limitation:

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24.97 tons SO<sub>2</sub> per rolling 12-month period

Applicable Compliance Method:

The annual emission limitation was established by multiplying the predicted annual asphalt production rate for slag mix of 110,000 tons by an emission factor of 0.368 lb of SO<sub>2</sub>/ton of product (based on stack testing performed on July 28, 2004 at Mar-Zane's Youngstown plant) and dividing by 2000 lbs/ton and adding to this the product of multiplying the maximum annual asphalt production rate for non-slag mix of 190,000 tons (when 110,000 tons of slag mix is produced creating worst case scenario) by an emission factor of 0.041 lb of SO<sub>2</sub>/ton (based on stack testing performed on August 25, 2004 at Mar-Zane's Youngstown plant) and dividing by 2000 lbs/ton. Compliance with the annual emission rate shall be demonstrated by the monitoring and record keeping for production specified in Section C.6. and the equation to calculate emissions specified in section B.1.

- e. Emissions Limitation:  
16.5 pounds nitrogen oxide (NO<sub>x</sub>) per hour

Applicable Compliance Method:

Compliance shall be determined by testing requirements specified in section E.2.

- f. Emissions Limitation:  
8.25 tons NO<sub>x</sub> per year

Applicable Compliance Method:

The emission limitation was established by multiplying the maximum annual asphalt production rate of 300,000 tons by a company supplied emission factor of 0.055 lb NO<sub>x</sub>/ton of product (AP-42, Section 11.1, Table 11.1-7, 03/04 plus 15% to be conservative due to low rating of factor) and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual asphalt production rate, compliance with the emission limitation will be assumed. Compliance with the annual asphalt production rate shall be demonstrated by the monitoring and record keeping in Section C.6.

- g. Emissions Limitation:  
102.60 pounds carbon monoxide (CO) per hour

Applicable Compliance Method:

Compliance shall be determined by testing requirements specified in section E.2

- h. Emissions Limitation:  
51.3 tons CO per rolling 12-month period

**Applicable Compliance Method:**

The emission limitation was established by multiplying a maximum rolling 12-month asphalt production rate of 300,000 tons by a company supplied emission factor of 0.342 lb CO/ton of product (based on compiled stack test data from the Flexible Pavement Association) and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual asphalt production rate, compliance with the emission limitation per rolling 12-month period will be assumed. Compliance with the rolling 12-month asphalt production rate shall be demonstrated by the monitoring and record keeping in Section C.6.

- i. Emissions Limitation:  
53.10 pounds organic compounds (OC) per hour

**Applicable Compliance Method:**

Compliance shall be determined by testing requirements specified in section E.2.

- j. Emissions Limitation:  
26.55 tons OC per rolling 12-month period

**Applicable Compliance Method:**

The emission limitation was established by multiplying a maximum rolling 12-month asphalt production rate of 300,000 tons by a company supplied emission factor of 0.177 lb VOC/ton of product (based on compiled stack test data from the Flexible Pavement Association) and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with this annual asphalt production rate, compliance with the emission limitation per rolling 12-month period will be assumed. Compliance with the rolling 12-month asphalt production rate shall be demonstrated by the monitoring and record keeping in Section C.6.

- k. Emissions Limitation:  
Visible fugitive particulate emissions shall not exceed 20% opacity as a three-minute average

**Applicable Compliance Method:**

Compliance with the visible emission limitation for the material handling operation(s) identified above 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.

1. Emission Limitation:  
Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.  
  
Applicable Compliance Method:  
If required compliance shall be demonstrated in accordance with USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 90 days after the first day of production for the 2005 season. However, if no slag mix is produced within this time period, the testing for SO<sub>2</sub> while producing slag mix can be delayed until up to one month after the first batch of slag mix is produced.
  - b. The emission testing shall be conducted to demonstrate compliance with the following:
    - i. 11.14 lbs/hr PE/PM<sub>10</sub>
    - ii. 0.04 gr/dscf
    - iii. 12.30 lbs/hr SO<sub>2</sub> for non-slag mixes
    - iv. 97.52 lbs/hr for slag mixes
    - v. 102.60 lbs/hr CO
    - vi. 53.10 lbs/hr OC
    - vii. 16.50 lbs/hr NO<sub>x</sub>
  - c. The emission testing shall also be conducted to verify the following company supplied emission factors:
    - i. 0.041 lb SO<sub>2</sub>/ton of product for non-slag mixes
    - ii. 0.368 lb SO<sub>2</sub>/ton of product for slag mixes
    - iii. 0.055 lb NO<sub>x</sub>/ton of product

- iv. 0.342 lb CO/ton of product
- v. 0.177 lb OC/ton of product
- d. The following test method(s) shall be employed to demonstrate compliance with the above emission limitations and verify company supplied emission factors:
  - i. Methods 1 - 4 of 40 CFR Part 60, Appendix A
  - ii. For PE & gr/dscf- Method 5, of 40 CFR Part 60, Appendix A.
  - iii. For SO<sub>2</sub>- Method 6 or 6C, of CFR Part 60, Appendix A.
  - iv. For CO- Method 10, of CFR Part 60, Appendix A.
  - v. For NO<sub>x</sub>- Method 7 or 7E of CFR Part 60, Appendix A.
  - vi. For OC- Method 18 or 25, of CFR Part 60, Appendix A.

The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the appropriate Ohio EPA District or local air agency.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification. The company shall demonstrate in the "Intent to Test" what is "Worst Case" for particulate emissions. (e.g. "Virgin aggregate"/slag.) This "Worst Case" scenario shall be pre-approved by the Ohio EPA, Division of Air Pollution Control, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emission 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 field office's refusal to accept the results of the emissions test(s).
- f. Personnel from the Ohio EPA, Northeast 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.

- g. 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, Northeast 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, Northeast District Office.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. In accordance with the provisions of OAC rule 3745-31-05, the following special terms and conditions of this permit to install are federally enforceable: A-F.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T001 - 30,000 gallon asphalt storage tank	OAC rule 3745-31-05 (A)(3)	0.10 ton/yr VOC
		Control Requirements (see A.2.a)
	OAC rule 3745-21-09(L)	Exempt (see A.2.b)

### 2. Additional Terms and Conditions

- 2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of a submerged fill pipe.
- 2.b In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L) because the tank has a capacity of less than 40,000 gallons.

### B. Operational Restrictions

None

### C. Monitoring and/or Record keeping Requirements

1. The owner and operator of this emissions unit shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the emissions unit.

### D. Reporting Requirements

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**Mar-2**

**PTI A**

**Issued: 3/24/2005**

Emissions Unit ID: **T001**

None

**E. Testing Requirements**

**1. Emission Limitation:**

0.10 ton of OC per year

Applicable Compliance Method:

The permittee may use U.S. EPA Tanks 4.0 program to demonstrate compliance with the annual limit of 0.10 ton per year for organic compound.

**F. Miscellaneous Requirements**

None

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T002 - 15,000 gallon no. 2 fuel oil / waste oil storage tank	OAC rule 3745-31-05 (A)(3)	0.10 ton/yr VOC
	OAC rule 3745-21-09(L)	Control Requirements (see A.2.a) Exempt (see A.2.b)

**2. Additional Terms and Conditions**

- 2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of a submerged fill pipe.
- 2.b In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L) because the tank has a capacity of less than 40,000 gallons.

**B. Operational Restrictions**

None

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

1. The owner and operator of this emissions unit shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the emissions unit.

**D. Reporting Requirements**

**Mar-Zane, Inc. Plant 27**  
**PTI Application: 02 20200**  
**Issued**

**Facility ID: 0278080443**

**Emissions Unit ID: T002**

None

**E. Testing Requirements**

**1. Emission Limitation:**

0.10 ton of OC per year

Applicable Compliance Method:

The permittee may use U.S. EPA Tanks 4.0 program to demonstrate compliance with the annual limit of 0.10 ton per year for organic compound.

**F. Miscellaneous Requirements**

None