

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

Permit To Install: 02-22993

A. Source Description

This source is a drum-mix asphalt plant (P903). It is located in Lorain County. The purpose of this modification is to allow the use of steel slag from blast furnaces in the asphalt pavement mix to accommodate an upcoming turnpike paving project as well as probable future projects.

Historically this plant has used a synthetic minor strategy which restricted operating hours to 2,000 hours per year. This is equivalent to 600,000 TPY for this plant. The plant has been derated from 300 TPH to 250 TPH while using slag mix since the plant can't run at the same capacity using the slag mix.

B. Facility Emissions and Attainment Status

The strategy has been changed slightly to use the 600,000 TPY production limit. 150,000 TPY will be allowed to be mix made with slag. This is very similar to the permits issued to Mar-Zane, Inc. in 2004. The emission factors used are based on stack testing performed at Mar-Zane, Inc. using the same source of slag. The highest value was used as was done in the Mar-Zane permits to ensure that synthetic minor status would be maintained.

C. Source Emissions

Annual allowable SO<sub>2</sub> emissions will increase from 29.4 TPY to 49.7 TPY. This increase does not exceed any major source or modeling thresholds.

D. Conclusion

This permit will need to be issued draft again since an emissions limit is being increased. The fee was based on a PWR of 600,000 lbs/hr and equals \$1,250.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL  
LORAIN COUNTY**

**CERTIFIED MAIL**

Street Address:

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

Mailing Address:

Lazarus Gov.  
Center

**Application No: 02-22993**

**Fac ID: 0247120476**

**DATE: 6/13/2008**

Kokosing Materials Inc  
Ralph Kyanko  
4140 E River Rd  
Fredericktown, OH 43019

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1250** will be due. Please do not submit any payment now.

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

Sincerely,

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

CC: USEPA

NEDO

**LORAIN COUNTY**

PUBLIC NOTICE  
ISSUANCE OF DRAFT PERMIT TO INSTALL **02-22993** FOR AN AIR CONTAMINANT SOURCE  
FOR **Kokosing Materials Inc**

On 6/13/2008 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Kokosing Materials Inc**, located at **4140 East River Rd, Lorain, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 02-22993:

**Use of slag in asphalt manufacturing.**

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

Dennis Bush, Ohio EPA, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087  
[(330)425-9171]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 02-22993**

Application Number: 02-22993  
Facility ID: 0247120476  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Kokosing Materials Inc  
Person to Contact: Ralph Kyanko  
Address: 4140 E River Rd  
Fredericktown, OH 43019

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4140 East River Rd  
Lorain, Ohio**

Description of proposed emissions unit(s):  
**Use of slag in asphalt manufacturing.**

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

**Kokosing Materials Inc**  
**PTI Application: 02-22993**  
**Issued: To be entered upon final issuance**  
**Part I - GENERAL TERMS AND CONDITIONS**

**Facility ID: 0247120476**

**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 the premises of this source at any reasonable time for purposes of making inspections,

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**PTI Application: 02-22993**

**Facility ID: 0247120476**

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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

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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

**Kokosing Materials Inc**

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Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

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**PTI Application: 02-22993**

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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> |
|------------------|----------------------|
| PE               | 21.0                 |
| OC               | 27.3                 |
| NOx              | 10.0                 |
| SO2              | 49.7                 |
| CO               | 58.3                 |

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

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

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

**Operations, Property, and/or Equipment - (P903) - 300 TPH Gentec drum asphalt plant with 60,000 ACFM baghouse. Permitted to burn natural gas, no. 2 fuel oil, or no. 4 on-spec used oil.**

**This plant is derated to 250 TPH while producing slag mixes.**

**The terms and conditions in this PTI supercede those of PTI 02-15963 issued for P903 on September 10, 2002 and administratively modified on April 15, 2008.**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures  |
|-------------------------------|--|
| OAC rule 3745-31-05(A)(3)     | <p>Emissions from the asphalt drum mix and silos shall not exceed the following limits:</p> <p>CO: 58.3 lbs/hr, 58.3 tpy<br/>           SO<sub>2</sub>: 110.4 lbs/hr for slag mixes, 29.4 lbs/hr for non-slag mixes, 49.7 tpy<br/>           NO<sub>x</sub>: 10.0 lbs/hr, 10.0 tpy<br/>           OC: 27.3 lbs/hr, 27.3 tpy<br/>           PE: 21.0 lbs/hr, 21.0 tpy</p> <p>Visible particulate emissions of fugitive dust from material transfer shall not exceed 20% opacity, as a 3-minute average.</p> <p>Minimize visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper, opacity shall not exceed 10%, as a 3-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart I.</p> |

|  |   |
|--|---|
| NSPS, 40 CFR 60, Subpart I   | PE shall not exceed 0.04 gr/dscf of exhaust gases.<br><br>Visible particulate emissions from the asphalt drum mix stack and/or silos shall not exceed 20% opacity, as a 6-minute average.   |
| OAC rule 3745-35-07(B)   | Emissions from the asphalt drum mix shall not exceed the following limits:<br><br>58.3 tons of CO, as a rolling, 12-month cumulative summation;<br><br>49.7 tons of SO <sub>2</sub> , as a rolling, 12-month cumulative summation;<br><br>27.3 tons of OC, as a rolling, 12-month cumulative summation;<br>and<br><br>annual production shall be restricted to 600,000 TPY, including a maximum of 150,000 TPY of mixes produced containing blast furnace steel slag (see section B.2. below).                                  |
| OAC rule 3745-17-07(A)(1)  | The visible particulate emissions limitation from the stack, as specified by this rule, is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.   |
| OAC rule 3745-17-07(B)   | The visible particulate emissions limitation for fugitive dust, as specified by this rule, is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| OAC rule 3745-17-11(B)   | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| OAC rule 3745-18-06  | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| OAC rule 3745-21-08(B)   | See A.2.e.  |
| <b>Aggregate handling (load in to hoppers)</b>                                     |   |
| OAC rule 3745-17-08(B),<br>in addition to above rules<br>where they are applicable | 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 elevator loading area, aggregate conveyor and storage bins. The cold aggregate elevator shall be covered at all times.<br><br>The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from the elevator loading area and from conveyors and transfer points to the dryer. |

**Issued: To be entered upon final issuance****2. Additional Terms and Conditions**

**2.a** The permittee shall use only natural gas, #2 fuel oil, or #4 'on-spec' used oil as a fuel in this unit; 'off-spec' used oil shall not be used in this unit.

**2.b** All #4 'on-spec' used oil burned in this emissions unit 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                | 2 ppm, maximum              |
| total halogens       | 4,000 ppm maximum           |
| mercury              | 1 ppm, maximum              |
| flash point          | 100°F, minimum              |
| heat content         | 135,000 BTU/gallon, minimum |

**2.c** If the permittee is burning used oil with any quantifiable level (above 2 ppm) of PCB's, then the permittee is subject to the notification requirements of 40 CFR 279.62.

**2.d** On-spec waste oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-58-50. Therefore, the permittee may receive and burn used oil exceeding 1,000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

**2.e** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 02-22993.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs

Emissions Unit ID: **P903**

and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.f** The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.

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**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water 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.
2. Annual asphalt production from emissions unit P903 shall not exceed 600,000 tons per year, based on a rolling, 12 month summation of the monthly production rates.

The combination of slag and non-slag asphalt pavement produced may not cause annual emissions of SO<sub>2</sub> to exceed 49.7 tons based on a rolling, 12 month summation and calculated using the following equation:

$$T = [(0.368 \text{ lb/ton} \times S) + (0.098 \text{ lb/ton} \times N)] / 2,000 \text{ lbs/ton}$$

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;  
0.098 lb/ton = emission factor for non-slag mixes; and  
N = total non-slag mix produced for each rolling, 12-month period.

3. The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in amounts not to exceed 50 percent of all aggregate materials in the raw material feed mix.

The permittee shall only use virgin aggregate, asphalt shingles and reclaimed asphalt pavement (RAP) in the raw material feed mix. For the purposes of this permit, virgin aggregate shall be clean, uncontaminated, quarried material.

No asbestos containing asphalt shingles may be used as part of the feed mix. Verification that the shingles do not contain asbestos can either be done by actual testing of a representative sample of the shingles, or by verification from the shingle manufacturer that the shingles do not contain asbestos. Records shall be kept documenting the asbestos verification of any shingles used in the feed mix. These records shall be maintained following the Part I General Terms and Conditions Records Retention Requirements term.

The permittee may substitute properly aged blast furnace steel slag in place of virgin

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aggregate in amounts not to exceed 70 percent (%) by weight of the total mix.

4. The source comprising this permit to install shall combust only natural gas, #2 fuel oil, or #4 'on-spec' used oil of no more than 0.5% sulfur content by weight. Combustion of any other fuel will constitute a violation of this term.
5. The permittee may not receive or burn any used oil which does not meet the specifications listed in A.2.b of this permit without first obtaining a permit to install that authorizes the burning of such off-specification used oil by applying for a new permit. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67 and is not authorized in the permit.
6. The permittee shall not exceed the maximum allowable operating temperature (degrees Fahrenheit), which was established during the most recent stack test that demonstrated the emissions unit to be in compliance.
7. The permittee shall not exceed the maximum allowable operating rate (tons per hour), from that which was established during the most recent stack test that demonstrated the emissions unit to be in compliance.

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

1. The permittee shall maintain monthly records of the following information:
  - a. The total slag mix asphalt pavement production, in tons per month.
  - b. The total non-slag mix asphalt pavement production, in tons per month.
2. The permittee shall maintain monthly records of the rolling 12-month cumulative summation of asphalt pavement produced, in tons (both slag and non-slag mixes) and the cumulative rolling 12-month emissions of CO, SO<sub>2</sub> and OC, calculated as required in the testing section.
3. The permittee shall properly 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.
4. The permittee shall maintain daily records of the percentage of RAP/asphalt shingles

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mixed with the raw material feed mix; the weight of the RAP/asphalt shingles shall not exceed the weight of the virgin aggregate and/or slag.

The permittee shall also maintain daily records of the percentage of blast furnace steel slag mixed with the raw material feed mix.

5. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of #2 fuel oil and #4 'on-spec' used 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 Ohio EPA Northeast District Office.
6. For each shipment of oil (#2 fuel oil or #4 'on-spec' used oil) received for burning in this emissions unit, the permittee shall maintain records of the total quantity of each type of oil received and the permittee's or oil supplier's analysis for sulfur content and heat content.
7. The permittee shall receive a chemical analysis with each shipment of #4 'on-spec' used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number (if available), and the following information:
  - a. date of shipment or delivery,
  - b. quantity of used oil received,
  - c. the Btu value of the used oil,
  - d. the flash point of the used oil,
  - e. the arsenic content,
  - f. the cadmium content,
  - g. the chromium content,
  - h. the lead content,
  - i. the PCB content,
  - j. the total halogen content, and
  - k. the mercury content.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the Ohio EPA Northeast District Office) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an

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independent laboratory of any #4 'on-spec' used oil shipment received by this facility, of any #4 'on-spec' used oil stored at this facility, or of any #4 'on-spec' used oil sampled at the dryer.

8. The permittee shall maintain records of the daily average operating temperature in degrees Fahrenheit.
9. The permittee shall maintain record of the daily peak production rate in tons per hour for slag and non-slag mixes.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify 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 any exceedance of the 50 percent (%) RAP/asphalt shingles content limitation as well as any exceedance of the 70 percent (%) blast furnace steel slag content limitation.
3. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling, 12-month cumulative summation of production for slag and non-slag mixes.
4. The permittee shall submit deviation (excursion) reports that identify any exceedance of the cumulative rolling, 12-month limits for CO, SO<sub>2</sub>, and/or OC emissions.
5. The permittee shall submit deviation (excursion) reports that identify any exceedance of the fuel oil's (#4 'on-spec' used oil or #2 fuel oil) allowable sulfur content (% sulfur).
6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of #4 'on-spec' used oil which is received for burning in this emissions unit, or a letter stating no #4 'on-spec' used oil was received that quarter, as appropriate. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
  - a. The total quantity of oil received in each shipment (gallons);
  - b. The weighted\* average sulfur dioxide emission rate (pounds/mmBtu) for the oil

Emissions Unit ID: **P903**

received during the calendar month; and,

- c. The weighted\* average heat content (Btu/gallon) of the oil received during the calendar month.

\*In proportion to the quantity of oil received in each shipment during the calendar month.

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, #2 fuel oil, and/or 'on-spec' used oil, meeting the requirements of this permit, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit deviation (excursion) reports which identify any exceedances of the maximum allowable operating temperature (degrees Fahrenheit), as was established during the most recent stack test that demonstrated the emissions unit to be in compliance.
9. The permittee shall submit deviation (excursion) reports which identify any exceedances of the maximum allowable operating rate (tons per hour), from that which was established during the most recent stack test that demonstrated the emissions unit to be in compliance.
10. The reports denoted by terms IV.1. through IV.9 are to be submitted quarterly and due by the dates and as described in the General Terms and Conditions of this permit under Part 1, Section (A)(2).
11. The permittee shall notify the USEPA and the Ohio EPA if any of the #4 'on-spec' used oil exceeds the #4 'on-spec' used oil specifications. 'Off-spec' used oil shall not be used in this unit. The permittee shall submit a new permit to install application for the use of any 'on-spec' oil that exceeds the #4 'on-spec' used oil specifications. The application must include an identification number obtained from USEPA, allowing the exceedance of the limitations established in this permit for #4 'on-spec' used oil. Each report shall be submitted within 30 days after the deviation occurs.

## **E. Testing Requirements**

1. Emission Limitation:

0.04 grain of particulate matter per dry standard cubic foot

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Applicable Compliance Method:

Compliance shall be shall be determined in the most recent performance stack test, as specified in section E.15.

2. Emission Limitation:

21.0 pounds of particulate emissions per hour

Applicable Compliance Method:

Compliance shall be determined in the most recent performance stack test, as specified in section E.15.

3. Emission Limitation:

21.0 tons of particulate emissions per year

Applicable Compliance Method:

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

where:

E = particulate emission rate in tons per year;

A = average emission rate in pounds PE per ton of asphalt produced from the most recent performance stack test; and

B = annual summation of asphalt produced (tons).

4. Emission Limitation:

10.0 pounds of NO<sub>x</sub> per hour

Applicable Compliance Method:

Compliance shall be determined in the most recent performance stack test, as specified in section E.15.

5. Emission Limitation:

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10.0 tons of NO<sub>x</sub> per year

Applicable Compliance Method:

Compliance shall be determined based upon the following formula:

$$E = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

where:

E = NO<sub>x</sub> emission rate in tons per year;

A = average emission rate in pounds NO<sub>x</sub> per ton of asphalt produced from the most recent performance stack test; and

B = annual summation of asphalt produced (tons).

6. Emission Limitation:

58.3 pounds of CO per hour

Applicable Compliance Method:

Compliance shall be determined in the most recent performance stack test, as specified in section E.15.

7. Emission Limitation:

58.3 tons of CO, as a rolling 12-month cumulative summation

Compliance shall be determined based upon the following formula:

$$E_r = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

where:

E<sub>r</sub> = CO, as a rolling 12-month cumulative summation;

A = average emission rate in pounds CO per ton of asphalt produced from the most recent performance stack test; and

B = rolling 12-month summation of asphalt produced (tons).

8. Emission Limitation:

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29.4 pounds of SO<sub>2</sub> per hour for non-slag mixes  
 110.4 pounds of SO<sub>2</sub> per hour for slag mixes

Applicable Compliance Method:

Compliance shall be determined in the most recent performance stack test, as specified in sections E.15. and E.16.

9. Emission Limitation:

49.7 tons of SO<sub>2</sub>, as a rolling, 12-month cumulative summation

Applicable Compliance Method:

Compliance shall be based upon the equation in section B.2 and the record keeping in section C.2.

10. Emission Limitation:

27.3 pounds of OC per hour

Applicable Compliance Method:

Compliance shall be determined in the most recent performance stack test, as specified in section E.15.

11. Emission Limitation:

27.3 tons of OC, as a rolling 12-month cumulative summation

Compliance shall be determined based upon the following formula:

$$E_r = A \times B [1 \text{ ton} / 2,000 \text{ lbs}]$$

where:

$E_r$  = OC, as a rolling 12-month cumulative summation;

A = average emission rate in pounds OC per ton of asphalt produced from the most recent performance stack test; and

B = rolling 12-month summation of asphalt produced (tons).

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12. Emission Limitation:

Visible particulate emissions from the asphalt drum mix stack and/or silos shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

13. Emission Limitation:

Visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper, opacity shall not exceed 10%, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by use of good engineering practices for the operations of this equipment. If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

14. Emission Limitation:

Visible particulate emissions of fugitive dust from material transfer shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by use of good engineering practices for the operations of aggregate transfer equipment and storage bins. If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

15. Upon request, the facility shall conduct additional emissions stack tests for particulate, NO<sub>x</sub>, OC, CO, and SO<sub>2</sub>, in accordance with the following requirements:

- a. The test shall be performed while burning #4 'on-spec' used oil.
- b. The test shall be performed using the maximum of 50% RAP/asphalt shingles

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- c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, NO<sub>x</sub>, CO, OC, and SO<sub>2</sub>.
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
  - Particulates - Method 5 of 40 CFR Part 60, Appendix A
  - NO<sub>x</sub> - Method 7, 7E of 40 CFR Part 60, Appendix A
  - CO - Method 10 of 40 CFR Part 60, Appendix A
  - OC - Method 18, 25, or 25A of 40 CFR Part 60, Appendix A
  - SO<sub>2</sub> - Method 6 of 40 CFR Part 60, Appendix A
- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast 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 Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

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.

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.

- 16. The permittee shall conduct or have conducted an emissions stack test in accordance with the following requirements:

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- a. The emission testing shall be performed during the first production scenario where greater than 45 percent (%) slag, by weight, is used in the mix.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for SO<sub>2</sub> while using slag.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 6 or 6A of 40 CFR Part 60, Appendix A

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. 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 Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

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.

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

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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.