



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/27/2012

Ralph Kyanko
KOKOSING MATERIALS INC - PLANT 505
PO Box 334
Fredericktown, OH 44089

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0142000087
Permit Number: P0111423
Permit Type: OAC Chapter 3745-31 Modification
County: Knox

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of 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 permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Mt. Vernon News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

Michael W. Ahern
Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-CDO



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description: KMI Plant 505 is a 275 TPH HMA plant.

3. Facility Emissions and Attainment Status:

KMI Plant 505 is an existing facility and has submitted a Federally enforceable air permit-to-install and operate (FEPTIO) application for the above referenced emission unit. KMI Plant 505 will be a synthetic minor facility located in Knox County. As a synthetic minor facility, KMI Plant 505 is a minor stationary source facility for purposes of major new source review applicability per Ohio Administrative Code (OAC) 3745-31 regulations. This is a draft/ final permit with terms and conditions based upon standard terms and conditions for similar emission units. Knox County is attainment for all criteria pollutants except Ozone. With the issuance of this permit, this facility maintains a PTE below the thresholds which trigger Title V permitting requirements.

4. Source Emissions:

Emissions unit P001 is subject to OAC rules 3745-17-07 and 3745-17-11 because it will generate particulate emissions. KMI Plant 505 is located within a non RACM area. Emission unit P001 is subject to New Source Performance Standards (NSPS) Subpart I of 40 CFR Part 60. As per OAC rule 3745-31-05, the terms and conditions also include compliance with the applicable NSPS standards.

Due to the fact that the applicable NSPS standard for P001 was promulgated after August 7, 1980, the fugitive emissions from the proposed emission units do not count towards the total Potential to Emit when determining Major New Source Review or Title V applicability. This FEPTIO is recommended to be issued in Draft/ Final format due to the continued synthetic minor facility status.

The allowable emissions are based upon the emission factors contained in the draft asphalt GP and site specific emissions testing.

5. Conclusion:

Compliance with the emission limits for emission limits P001 will be verified through emissions testing, as required by the terms and conditions of the permit. The terms and conditions for the proposed emission units are based upon standard terms and conditions found in other recently issued PTIs for similar emission units. Likewise, this FEPTIO identifies the applicable rules and corresponding requirements. This permit also contains record keeping and reporting to ensure compliance with the applicable rule requirements. Please call me if you have any questions (728-3813).

6. Please provide additional notes or comments as necessary:

None



7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PM stack	6.51
PM-10 stack	6.51
NOx	20.29
CO	44.98
SO2	18.48
VOC	28.0
PM fugitive	2.90
PM-10 fugitive	1.42

PUBLIC NOTICE

12/27/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

KOKOSING MATERIALS INC - PLANT 505

11622 Hyatt Road,
Fredericktown, OH 43019
Knox County

FACILITY DESC.: Asphalt Paving Mixture and Block Manufacturing

PERMIT #: P0111423

PERMIT TYPE: OAC Chapter 3745-31 Modification

PERMIT DESC: KMI Plant 505

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Todd Scarborough, Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049. Ph: (614)728-3778



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
KOKOSING MATERIALS INC - PLANT 505**

Facility ID:	0142000087
Permit Number:	P0111423
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	12/27/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



**Division of Air Pollution Control
Permit-to-Install and Operate**
for
KOKOSING MATERIALS INC - PLANT 505

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Draft Permit-to-Install and Operate
KOKOSING MATERIALS INC - PLANT 505
Permit Number: P0111423
Facility ID: 0142000087

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0142000087
Application Number(s): A0045790
Permit Number: P0111423
Permit Description: KMI Plant 505
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$1,250.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 12/27/2012
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

KOKOSING MATERIALS INC - PLANT 505
11622 Hyatt Road
Fredericktown, OH 43019

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



Draft Permit-to-Install and Operate

KOKOSING MATERIALS INC - PLANT 505

Permit Number: P0111423

Facility ID: 0142000087

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0111423

Permit Description: KMI Plant 505

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P001
Company Equipment ID:	Plant 505
Superseded Permit Number:	P0105552
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
KOKOSING MATERIALS INC - PLANT 505
Permit Number: P0111423
Facility ID: 0142000087
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Draft Permit-to-Install and Operate
KOKOSING MATERIALS INC - PLANT 505
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B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

KOKOSING MATERIALS INC - PLANT 505

Permit Number: P0111423

Facility ID: 0142000087

Effective Date: To be entered upon final issuance

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Draft Permit-to-Install and Operate
KOKOSING MATERIALS INC - PLANT 505
Permit Number: P0111423
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C. Emissions Unit Terms and Conditions



1. P001, Plant 505

Operations, Property and/or Equipment Description:

275 TPH asphalt plant controlled by a baghouse and known as Plant 505

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)d., d)(9)-(11) and e)(9)

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., c)(3), d)(3), and and e)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Carbon monoxide (CO) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 44.17 lbs/hr. Carbon monoxide (CO) emissions from burning natural gas shall not exceed 22.0 lbs/hr. Nitrogen Oxide (NO _x) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 20.3 lbs/hr. NO _x emissions from burning natural gas shall not exceed 7.98 lbs/hr. Sulfur Dioxide (SO ₂) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 18.15 lbs/hr.



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KOKOSING MATERIALS INC - PLANT 505

Permit Number: P0111423

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>SO₂ emissions from burning natural gas shall not exceed 3.03 lbs/hr.</p> <p>Volatile Organic Compound (VOC) emissions from burning on-spec used oil, number 2 fuel oil or natural gas shall not exceed 27.5 lbs/hr.</p> <p>PE from the stack shall not exceed 0.03 gr/dscf when burning on-spec used oil, number 2 fuel oil, or natural gas.</p> <p>Emissions of fugitive PM₁₀ shall not exceed 1.42 pound per hour when burning on-spec oil, number 2 fuel oil, or natural gas.</p> <p>Fugitive particulate emissions shall not exceed 2.90 pounds per hour when burning on-spec oil, number 2 fuel oil, or natural gas.</p> <p>Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in b)(2)b below.</p> <p>Visible particulate emissions from the stack shall not exceed 10% opacity, as a 3-minute average.</p> <p>Bestavailable control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust .See section b)(2)a.</p> <p>No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper.</p> <p>Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper) shall be less than or equal to 10% opacity, as a 3-minute average.</p>



Draft Permit-to-Install and Operate

KOKOSING MATERIALS INC - PLANT 505

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.</p> <p>The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40CFR Part 60, Subpart I.</p> <p>See b)(2)a-c below.</p>
b.	OAC rule 3745-31-05(D)	<p>Particulate emissions (PE) from the stack shall not exceed 6.51 tons per rolling 12-month period.</p> <p>PM₁₀ emissions from the stack shall not exceed 6.51 tons per rolling 12-month period.</p> <p>Fugitive PE shall not exceed 2.90 tons per rolling 12-month period.</p> <p>Fugitive PM₁₀ emissions shall not exceed 1.42 tons per rolling 12-month period.</p> <p>CO emissions shall not exceed 44.98 tons per rolling 12-month period.</p> <p>VOC emissions shall not exceed 28.0 tons per rolling 12-month period.</p> <p>SO₂ emissions shall not exceed 18.48 tons per rolling 12-month period.</p> <p>NO_x emissions shall not exceed 20.29 tons per rolling 12-month period.</p> <p>Fugitive emissions shall not exceed 4.58 tons VOC per rolling 12-month period and 0.71 ton CO per rolling 12-month period.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E) 40 CFR Part 60, Subpart I	The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
d.	ORC 3704.03(F)	d)(9)-(11) and e)(9);

(2) Additional Terms and Conditions

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

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
total halogens	4,000 ppm maximum
lead	100 ppm, maximum
flash point	100°F, minimum

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

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

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated,



pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.*

If analytical results demonstrate that used oil containing 1,000 ppm or more total halogens, but less than 4,000 total halogens, does not contain greater than 100 ppm of any individual halogenated hazardous constituent found in the F001 and F002 listings in OAC rule 3745-51-31 and there is no information suggesting that any other halogenated hazardous constituent (e.g., chlorinated pesticides) has come in contact with the oil, then the presumption that the oil contains hazardous waste has been successfully rebutted.** The rebuttable presumption does not apply to either metal working oils/fluids containing chlorinated paraffins, if processed through a tolling arrangement as described in OAC rule 3745-279-24(C), or used oils contaminated with chlorofluorocarbons removed from refrigeration units.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit and the fuel oil analyses shall document compliance with each limitation before it is burned. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter. If the used oil analyses shows total halogens of 1,000 ppm or greater, the permittee shall obtain and maintain all the necessary records to successfully rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste in accordance with this permit.

*EPA publication SW-846, 3rd (or most current) edition, is available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954; 202/512-1800, document number 955-001-00000-1.

**Division of Materials and Waste Management policy documented in "Used Oil Burners - New Guidance for Rebuttable Presumption", published April 2008 or most current policy

- c. All number 2 and on-spec used oil burned in this emission unit shall have a sulfur content equal to or less than 0.5%.
- c) Operational Restrictions
- (1) The pressure drop across the fabric filter shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.



- (2) The permittee may not receive or burn any on-spec used oil which does not meet the specifications listed in b)(2)b of this permit without first obtaining a permit to install that authorizes the burning of such off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
 - (3) The maximum annual asphalt production rate for this emissions unit shall not exceed 560,000 tons per year, based upon a rolling, 12-month summation of the production rates. The company has existing records for the current operational location such that the applicant does not need to be restricted to first year monthly asphalt production.
 - (4) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for VOC, CO and NOx. The permittee shall submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the Ohio EPA, Central District Office responsible for the permitting of the facility with the PER.
 - (5) The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.
 - (6) The exit of the stack serving this emissions unit shall be a minimum of 35 feet above ground.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC rule 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point



- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC paragraph 3745-279-63(B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury and PCB limitations contained in this permit.

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

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

- (2) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter 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 fabric filter on daily basis.
- (3) The permittee shall maintain monthly records of the following information:
 - a. The asphalt production for each month;
 - b. The rolling, 12-month summation of the asphalt production; and
 - c. The maximum percentage RAP used for any mix.
- (4) For each shipment of number 2 fuel oil, and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
- (5) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the enclosures for the hot aggregate elevator, vibrating screens and weigh hopper servicing this emissions unit. The presence or absence of any visible emissions shall be



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

- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
- (6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack, aggregate storage bins and cold aggregate elevator/conveyor serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
- (7) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(3)). An alternative form may be used upon approval of the Ohio EPA, Central District Office.
- (8) For each day during which the permittee uses any raw material that is not specifically identified in the PTIO application submitted on October 5th, 2012 without prior approval from Ohio EPA, the permittee shall maintain a record of the type and quantity of raw material employed in this emissions unit.
- (9) The permit to install and operate application for this emissions unit(s), (P001), was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration



Effective Date: To be entered upon final issuance

result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Heptane

TLV (mg/m³): 1,640

Maximum Hourly Emission Rate (lbs/hr): 2.53

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.15

MAGLC (ug/m³): 39,048



The permittee, has demonstrated that emissions of Heptane from emissions unit(s), P002, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (10) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final permit prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (11) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);



- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

- (1) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These reports are due by the date described in Part A Standard Terms and Conditions of this permit.
- (2) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling 12-month asphalt production limitation. These reports are due by the date described in Part A Standard Terms and Conditions of this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the RAP limitation specified above. These reports are due by the date described in Part A Standard Terms and Conditions of this permit.
- (4) The permittee shall submit annual reports which specify the total PM, SO₂, NO_x, VOC and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.
- (5) The permittee shall submit quarterly reports that identify the following information concerning the quality of used oil burned in this emissions unit:
 - a. any exceedance of the used oil standards in OAC rule 3745-279-11;
 - b. any occasion where used oil containing 1,000 ppm or more total halogens was burned prior to receiving information demonstrating a successful rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste;
 - c. any exceedance of the limitations for mercury and/or PCBs; and
 - d. any deviation from the minimum heat content of 135,000 Btu/gallon.

These reports are due by the date described in Part A Standard Terms and Conditions of this permit.

- (6) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limit specified above. These reports are due by the date described in Part A Standard Terms and Conditions of this permit.



- (7) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(5) and d)(6) above:
 - a. all days during which any visible particulate emissions were observed from the stack, aggregate storage bins and cold aggregate elevator/conveyors serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from the enclosures for the hot aggregate elevator, vibrating screens, weigh hopper;
 - c. any corrective actions taken to eliminate the visible particulate emissions.
 - (8) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (9) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations: Carbon monoxide (CO) emissions from on-spec used oil or number 2 fuel oil shall not exceed 44.17lbs/hr; Carbon monoxide (CO) emissions from burning natural gas shall not exceed 22.0lbs/hr; Nitrogen Oxide (NO_x) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 20.03 lbs/hr; NO_x emissions from burning natural gas shall not exceed 7.98 lbs/hr; Sulfur Dioxide (SO₂) emissions from burning on-spec used oil or number 2 fuel oil shall not exceed 18.15 lbs/hr; SO₂ emissions from burning natural gas shall not exceed 3.03 lbs/hr; Volatile Organic Compound (VOC) emissions from burning natural gas , on-spec used oil or number 2 fuel oil shall not exceed 27.5 lbs/hr; PE from the stack shall not exceed 0.03 gr/dscf

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

 - i. The emission testing shall be conducted within 24 months after issuance of this permit and within 6 months prior to permit renewal.



- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, CO, NO_x, SO₂, and VOC in the appropriate averaging period(s).
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

NO_x, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

SO₂, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

VOC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

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

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity and burning on spec used oil for PE, CO, NO_x, SO₂ and VOC and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA, CDO.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

- b. Emissions Limitation: PE emissions shall not exceed 6.51 tons per rolling 12-month period.

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

- c. Emission Limitation: VOC emissions shall not exceed 28.0 tons per rolling 12-month period.

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

- d. Emission Limitation: CO emissions shall not exceed 44.98 tons per rolling 12-month period.

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

- e. Emission Limitation: SO₂ emissions shall not exceed 18.48 tons per rolling 12-month period.

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



- f. Emission Limitation: NO_x emissions shall not exceed 20.29 tons per rolling 12-month period.

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

- g. Emission Limitations: Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in b)(2)b.

Applicable Compliance Method: Compliance with the emissions limitation for arsenic, cadmium and lead shall be demonstrated by the monitoring and record keeping required by term and condition d)(1) of this permit.

- h. Emission Limitation: Visible particulate emissions from the stack shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A, as such appendix existed on July 1, 1996 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- i. Emission Limitation: No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens and weigh hopper.

Applicable Compliance Method: Compliance with the limitations on visible emissions of fugitive dust found in Section b)1 of this permit shall be demonstrated by the monitoring and record keeping required by term and condition d)(5).

- j. Emission Limitation: Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper) shall be less than or equal to 10% opacity, as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- k. Emissions Limitation: PM-10 emissions from the stack shall not exceed 6.51 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month emissions limitation for particulate emissions.



- I. Emissions Limitation: Fugitive PM₁₀ emissions shall not exceed 1.42 tons per rolling 12-month period.

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

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

Fugitives emissions from the cold end are calculated as follows

$$((560,000 \text{ tons of material/year} \times 0.0024 \text{ lb PM}_{10}/\text{ton of material}) + (336,000 \text{ tons of aggregate/year} \times 0.0033 \text{ lb PM}_{10}/\text{ton of aggregate}) + (224,000 \text{ tons of sand/year} \times 0.00099 \text{ lb PM}_{10}/\text{ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 1.34 \text{ tons of PM}_{10}$$

Fugitives emissions from the hot end are calculated as follows

$$(560,000 \text{ tons of asphalt produced} \times 0.0003 \text{ lb of PM}_{10}/\text{ton of asphalt produced}) \times (1 \text{ ton}/2000 \text{ pounds}) = 0.08 \text{ tons of PM}_{10}$$

Total fugitive emissions are therefore 1.42 tons.

The emission factors in the above equations are derived from AP-42, Fifth edition, Table 11.12-2(10/01) and from AP-42, Fifth edition, 11.1.2.5(12/00)

- m. Emissions Limitation: Fugitive PM emissions shall not exceed 2.90 tons per rolling 12-month period.

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

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

Fugitives emissions from the cold end are calculated as follows

$$((560,000 \text{ tons of material/year} \times 0.0051 \text{ lb PM}/\text{ton of material}) + (336,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM}/\text{ton of aggregate}) + (224,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM}/\text{ton of sand})) \times (1 \text{ ton}/2000 \text{ pounds}) = 2.82 \text{ tons of PM}$$

Fugitives emissions from the hot end are calculated as follows

$$(560,000 \text{ tons of asphalt produced} \times 0.0003 \text{ lb of PM}/\text{ton of asphalt produced}) \times (1 \text{ ton}/2000 \text{ pounds}) = 0.084 \text{ tons of PM}$$



Total fugitive emissions are therefore 2.90 tons.

The emission factors in the above equations are derived from AP-42, Fifth edition, Table 11.12-2(10/01) and from AP-42, Fifth edition, 11.1.2.5(12/00)

- n. Emission Limitations: Emissions of fugitive PM-10 shall not exceed 1.42 pounds per hour when burning natural gas, on-spec used oil or number 2 fuel oil.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month operational restriction.

- o. Emission Limitations: Emissions of fugitive PM shall not exceed 2.90 pounds per hour when burning natural gas, on-spec used oil or number 2 fuel oil.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month operational restriction.

- p. Emission Limitation: Fugitive emissions shall not exceed 4.58 tons VOC per rolling 12-month period and 0.71 ton CO per rolling 12-month period.

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

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

Activity	Pollutant	Predictive Emission Factor Equation (lb/ton)
Load-out	VOC**	$EF = 0.0172 (-V)e^{((0.251)(T+500) - 20.43)}$
Silo Filling	VOC**	$EF = 0.0504 (-V)e^{((0.251)(T+500) - 20.43)}$
Load-out	CO	$EF = 0.00558 (-V)e^{((0.251)(T+500) - 20.43)}$
Silo Filling	CO	$EF = 0.00488 (-V)e^{((0.251)(T+500) - 20.43)}$

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP

** Assumes VOC = TOC

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



Activity	Pollutant	EF, in lb/ton	tons/year (@560,000 tons/yr production)
Load-out	VOC*	4.16×10^{-3}	1.16
Silo Filling	VOC*	1.22×10^{-2}	3.42
		Total VOC = 4.58	
Load-out	CO	1.35×10^{-3}	0.378
Silo Filling	CO	1.18×10^{-3}	0.33
		Total VOC = 0.71	

(2) Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emissions rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO_x, O₂ and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in f)(1). The baselines shall be determined for NO_x, and CO. Sampling should measure the exhaust gas values exiting the dryer or the baghouse. The duration of each sample shall follow the portable monitor



manufacture's recommendations. Record these values on the Burner Tuning Reporting Form for Asphalt Concrete Plants form (as found in g)(3)) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in f)(1) The general procedure for tuning the burner involves the following steps:

Review the plant operations to ensure the plant is operating normally.

Confirm that the portable monitor is calibrated per the manufacture's specifications.

Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O₂, NO_x, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form.

Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 per cent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to Section v. below.

The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 per cent of the baseline values. Make any necessary adjustments and repairs. Repeat Sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 per cent of the pollutant baseline values.

Once all of the measured stack exhaust gas values are within the 115 per cent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form.

By January 31 of each year, submit a copy of all Burner Tuning Reporting Form for Asphalt Concrete Plants forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior



to the associated tuning due date. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

g) Miscellaneous Requirements

- (1) The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>(Subpart)</u>	<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation</u>
	P001	275 tphasphalt plant	Subpart I

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

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

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

Reports are to be sent to:

Ohio Environmental Protection Agency
 DAPC- Air Quality Modeling and Planning
 P.O. Box 1049
 Columbus, OH 43216-1049

and

Ohio EPA, Central District Office
 Division of Air Pollution Control
 50 West Town Street, 6th Floor
 Columbus, OH 43216-1049

- (2) The terms and conditions of this PTI are federally enforceable.
- (3) Burner Tuning Form (See next page)



Effective Date: To be entered upon final issuance

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

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

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

Tuning Results:

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



Draft Permit-to-Install and Operate

KOKOSING MATERIALS INC - PLANT 505

Permit Number: P0111423

Facility ID: 0142000087

Effective Date: To be entered upon final issuance

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

² Specify whether on a dry or wet basis.

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

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

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

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