



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

3/15/2013

Certified Mail

Ralph Kyanko
KOKOSING MATERIALS, INC. - Plant 503
17531 WATERFORD RD
PO Box 334
FREDERICKTOWN, OH 43019

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

Facility ID: 0247120476
Permit Number: P0112621
Permit Type: Initial Installation
County: Lorain

No	TOXIC REVIEW
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	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, The Chronicle Telegram. 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, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

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, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-NEDO; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Kokosing Materials Inc., Plant 503, (Kokosing) which is located on 4140 East River Road in Lorain, Ohio submitted a permit-to-install application for the installation of a 450 tons per hour (TPH) asphalt plant.

3. Facility Emissions and Attainment Status:

This facility has requested a synthetic minor permit because the maximum potential to emit, at 8760 hours per year, for this emissions unit would make this facility a major source and will be subject to Title V and PSD permitting requirements. Federally enforceable restrictions will lower the potential emissions to less than 100 TPY. These restrictions will keep the company from being subject to the requirements of PSD review and Title V. The facility is located in Lorain County. Lorain County is attainment for particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), sulfur dioxide (SO₂), carbon monoxide (CO), ozone [volatile organic compounds (VOC) as a precursor to ozone], lead, and nitrogen oxides (NO_x).

4. Source Emissions:

Kokosing Materials Inc., Plant 503, has requested federally enforceable restriction on the annual production of asphalt produced to 580,000 tons. With the proposed production limitation, the annual NO_x, CO, SO₂, PE, and VOC emissions will be limited to 34.8 tpy (TPY), 79.03 tpy, 43.5 tpy, 12.75 tpy, and 68.4 tpy, respectively.

5. Conclusion:

This facility will have federally enforceable limitations that will keep permit allowable mass emissions below the threshold emission levels that would trigger being subject to PSD review or Title V.

6. Please provide additional notes or comments as necessary:

None.



Permit Strategy Write-Up
Kokosing Materials, Inc.
Permit Number: P0112621
Facility ID: 0247120476

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	34.8
SO2	43.5
CO	79.03
VOC	68.4
PE	12.75

PUBLIC NOTICE
3/15/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

KOKOSING MATERIALS, INC. - Plant 503
4140 EAST RIVER RD,
Lorain, OH 44054
Lorain County

FACILITY DESC.: Asphalt Paving Mixture and Block Manufacturing

PERMIT #: P0112621

PERMIT TYPE: Initial Installation

PERMIT DESC: FEPTIO for initial installation of 450 TPH Double Barrel Astec Asphalt Plant with a 75,000 ACFM baghouse.

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: Kurt Smith, Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087. Ph: (330)425-9171



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
KOKOSING MATERIALS, INC. - Plant 503**

Facility ID:	0247120476
Permit Number:	P0112621
Permit Type:	Initial Installation
Issued:	3/15/2013
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 503

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Draft Permit-to-Install and Operate

KOKOSING MATERIALS, INC. - Plant 503

Permit Number: P0112621

Facility ID: 0247120476

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0247120476
Application Number(s): A0046638
Permit Number: P0112621
Permit Description: FEPTIO for initial installation of 450 TPH Double Barrel Astec Asphalt Plant with a 75,000 ACFM baghouse.
Permit Type: Initial Installation
Permit Fee: \$1,250.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 3/15/2013
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 503
4140 EAST RIVER RD
Lorain, OH 44054

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, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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 503
Permit Number: P0112621
Facility ID: 0247120476

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0112621

Permit Description: FEPTIO for initial installation of 450 TPH Double Barrel Astec Asphalt Plant with a 75,000 ACFM baghouse.

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

Emissions Unit ID:	P908
Company Equipment ID:	450 TPH Double Barrel
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
KOKOSING MATERIALS, INC. - Plant 503
Permit Number: P0112621
Facility ID: 0247120476
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, Northeast 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 503
Permit Number: P0112621
Facility ID: 0247120476
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



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 503
Permit Number: P0112621
Facility ID: 0247120476
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P908, 450 TPH Double Barrel Astec Asphalt Plant with a 75,000 ACFM Baghouse

Operations, Property and/or Equipment Description:

450 TPH Double Barrel Astec Asphalt Plant with a 75,000 ACFM baghouse

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. g)(3).

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

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.	ORC 3704.03(T)	Stack Emissions while burning natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and/or on-spec used oil in this emissions unit: Nitrogen Oxides (NO _x) emissions while burning natural gas shall not exceed 0.055 pound per ton of asphalt produced. (NO _x) emissions while burning on spec waste oil and #2 fuel oil shall not exceed 0.10 pound per ton of asphalt produced. (NO _x) emissions while burning #4 fuel oil or #6 fuel oil shall not exceed 0.12 pound per ton of asphalt produced. SO ₂ emissions while burning natural gas shall not exceed 0.021 pound per ton of asphalt produced.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Sulfur Dioxide (SO₂) emissions while burning on-spec used oil, or #2 fuel oil shall not exceed 0.10 pound per ton of asphalt produced.</p> <p>SO₂ emissions while burning #4 fuel oil shall not exceed 0.11 pound per ton of asphalt produced.</p> <p>SO₂ emissions while burning #6 fuel oil shall not exceed 0.15 pound per ton of asphalt produced.</p> <p>SO₂ emissions while employing slag in the mix shall not exceed 0.53 pound per ton of slag applied in addition to the emissions generated while burning any permitted fuel.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.27 pound per ton of asphalt produced while burning any approved fuel.</p> <p>Volatile organic compound (VOC) emissions while burning any approved fuel shall not exceed 0.22 pound per ton of asphalt produced.</p> <p>Particulate emissions (PE) while burning any approved fuel shall not exceed 0.03 gr/dscf.</p> <p>See b)(2)a. - b)(2)e.</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD and Title V permitting)	<p>Emissions while burning natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and/or on-spec used oil in this emissions unit:</p> <p>PE shall not exceed 12.75 tons per rolling 12-month period.</p> <p>VOC emissions shall not exceed 68.4 tons per rolling 12-month period.</p> <p>CO emissions shall not exceed 79.03 tons per rolling 12-month period.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		SO ₂ emissions shall not exceed 43.50 tons per rolling 12-month period. NO _x emissions shall not exceed 34.8 tons per rolling 12-month period.
d.	OAC rule 3745-17-11(B)(1) OAC rule 3745-17-07(A)(1) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-18-06(E) NSPS, 40 CFR, Part 60, Subpart I	The emission limitations specified by these rules are less stringent than or are equivalent to the emission limitations established pursuant to ORC 3704.03(T).
e.	OAC rule 3745-15-07	See b)(2)i., c)(1), d)(1), e)(3), e)(4) and f)(3).

(2) Additional Terms and Conditions

- a. The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.
- b. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from conveyors and all transfer points to the dryer.
- c. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- d. Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10 per cent opacity, as a 3-minute average.
- e. Visible particulate emissions from the stack shall not exceed 20 per cent opacity, as a 3-minute average.
- f. 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 per cent, by weight.
- g. All number 4 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 0.8 per cent, by weight.
- h. All number 6 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 1.0 per cent, by weight.
- i. Each shipment of oil burned in this emissions unit shall be “on-specification” (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other



Effective Date: To be entered upon final issuance

information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
total halogens	less than 1,000 ppm; or 4,000 ppm maximum if the presumption that the used oil contains hazardous waste is rebutted, as described below
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
PCBs	less than 50 ppm
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.

**DHWM policy documented in "Used Oil Burners - New Guidance for Rebuttable Presumption", published April 2008 or most current policy

- j. In accordance with 40 CFR Part 60 Subpart I 60.90(a) and (b), this emissions unit is a hot mix asphalt plant that has commenced construction or modification after June 11, 1973, and is subject to the emission limitations/control measures specified in 40 CFR Part 60 Subpart I.

c) **Operational Restrictions**

- (1) The permittee may not receive or burn any used oil which does not meet the specifications listed in this permit without first obtaining a permit-to-install that authorizes the burning of off-specification used oil. The burning of off-specification used oil, subject to OAC rule 3745-279-60 through 67, is prohibited as a fuel in this emissions unit.
- (2) The permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit. The amount of asphalt produced is restricted in two ways:
 - a. the total amount of asphalt produced using any fuel is limited to 580,000 tons per rolling 12-month period. To ensure enforceability during the first 12 calendar months of operation following the initial startup of this emissions unit, the permittee shall not exceed the production levels specified in the following table:



Month(s)	Maximum Allowable Cumulative Production (Tons)
1	139,000
1-2	278,000
1-3	417,000
1-12	580,000

- b. the amount of asphalt produced and the SO₂ by fuel is restricted by the following equation:

$$(0.021)(a) + (0.10)(b) + (0.11)(c) + (0.15)(d) + (0.53)(e) \leq 43.50 \text{ tons per rolling 12-month period}$$

Where:

a = Tons asphalt produced with natural gas and/or propane per rolling, 12-month period

b = Tons asphalt produced with #2 fuel oil and/or used oil per rolling, 12-month period

c = Tons asphalt produced with #4 fuel oil per rolling, 12-month period

d = Tons asphalt produced with #6 fuel oil per rolling, 12-month period; and

e = Tons of slag employed in the aggregate mix per rolling 12-month period.

- (3) 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 CO and NO_x. 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 appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER.
- (4) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in the raw material feed mix in amounts not to exceed 50 per cent of all aggregate materials on an hourly basis. The permittee may not substitute raw materials for the aggregate such as slag, rubber, etc. without prior approval from Ohio EPA.

The permittee may substitute slag or sand slag produced from blast, basic oxygen, and open hearth furnaces into the asphalt mix, as described in OAC rule 3745-51-04(B)(7). Slag produced from other sources, such as electric arc furnaces, must be evaluated in accordance with OAC rule 3745-52-11. If determined to be hazardous waste, the slag



must be managed in accordance with applicable regulations in OAC chapter 3745-266, recyclable materials used in a manner constituting disposal.

The permittee shall use only 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.

- (5) The permittee shall only burn natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel.
- (6) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
- (7) The pressure drop across the baghouse shall be maintained within the range of 1.0 to 8.0 inches of water while the emissions unit is in operation. The discharge of the baghouse (i.e., the baghouse shall be a minimum of 50 feet above the ground, prior to commencing use of slag.
- (8) The sulfur content in the slag used in the aggregate mix shall not exceed 1.75% sulfur, by weight. The permittee may use slag with higher sulfur content than 1.75% if prior approval is granted by Ohio EPA and stack testing is performed to demonstrate the sulfur dioxide emission limits are not exceeded.
- (9) The amount of slag employed in the mix shall not exceed, at any time 3,500 tons per day.

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 (or if the oil is generated on site, the permittee shall conduct the chemical analyses), which shall contain the following information:
 - a. the date the used oil was received at the facility and the amount received;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/refiner, supplier, and/or marketer;
 - c. the results of the following chemical analyses, demonstrating that the used oil meets the standards in OAC rule 3745-279-11:
 - 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. where the chemical analysis shows a total halogen content between 1,000 ppm, and below 4,000 ppm, the successful demonstration for the rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste, as described in OAC rule 3745-279-63(C); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and the mercury and PCB limitations contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years* following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) 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.

*The Division of Air Pollution Control requires these records to be maintained for 5 years.

- (2) The permittee shall maintain monthly records of the following information:
- a. the total asphalt production for each month;
 - b. the total asphalt produced for each fuel type for each month;
 - c. the cumulative asphalt production and asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of emissions unit P908;
 - d. the rolling, 12 month summation of the total asphalt production and the asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - e. the rolling, 12-month summation of the PE, SO₂, NO_x, VOC and CO emissions; and
 - f. the maximum percentage of RAP and/or asphalt shingles used for any mix type.
- (3) For each shipment of number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.



- (4) The permittee shall submit and receive approval from Ohio EPA for a slag sampling and testing plan prior to applying slag in the asphalt mix. In the slag sampling plan, the permittee shall commit to demonstrating that the sulfur content of the slag does not exceed the established limit.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (6) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation log:
 - a. the location and color of the visible emissions;
 - b. the cause of the visible particulate emissions;
 - c. the total duration of any visible emissions incident; and
 - d. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d above or continue the daily check until the incident has ended. The



observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (7) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (8) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants*. An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.
- (9) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The acceptable pressure drop shall be based upon the manufacturer's



specifications until such time as any required emission testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.



- (10) The permittee shall maintain daily records of the following:
- a. The amount, in tons of slag used, furnace type that produced the slag, and the type (grade) of slag employed; and
 - b. The maximum amount, in percent of RAP and/or shingles used in any mix.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the maximum allowable cumulative production levels the probable cause of each deviation (excursion);
 - ii. all exceedances of the rolling 12-month total PE, SO₂, NO_x, VOC and CO emission limitations;
 - iii. all exceedances of the sulfur content limitations;
 - iv. all exceedances of the slag mix, including daily tons of slag used, restrictions;
 - v. all exceedances of the RAP and/or shingles substitution limitation of 50% of each asphalt mixed produced;
 - vi. each period of time (start time and date, and end date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - vii. each period of time (start time and date, and end date) when the pressure drop across the baghouse was outside of the acceptable range;
 - viii. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - ix. all days during which any visible emissions of fugitive were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - x. all days during which any visible emissions of fugitive were observed from the enclosures for the rotary drum and the hot mix asphalt elevator serving this emissions unit.



- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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. The permittee shall identify in the annual permit evaluation report 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.

- (4) Where the analytical results for any shipment of used oil burned in this emissions unit establish that the used oil contains total halogens greater than 1,000 ppm, but less than 4,000 ppm, the results of the analysis for total halogens (from the appropriate test Method 9075, 9076, or 9077) and the information obtained to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste shall be submitted to the appropriate District Office or local air agency. Each rebuttal demonstration shall include:

- a. the date the used oil was received;
- b. the facility location or identification number where the oil was or will be burned;
- c. the amount of oil in the shipment; and



- d. all information, including all the analytical results, relied upon by the permittee to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste.

The rebuttal demonstrations for used oil received from October to December shall be submitted by January 31; used oil received from January to March, by April 30; used oil received from April to June, by July 31; and used oil received from July to September, by October 31.

- (5) The permittee shall submit deviation (excursion) reports that identify any exceedances of the rolling 12-month cumulative asphalt tonnage limitation.

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. Emissions Limitation:

PE emissions shall not exceed 12.75 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by the following calculation:

$$\frac{\{(E_{PE2})(R_2)+(E_{PE4})(R_4)+(E_{PE6})(R_6)+(E_{PEUO})(R_{UO})+(E_{PENg})(R_{NG})\} + [PE_{SF}+PE_{LO}+PE_{CE}]}{2000}$$

Where:

E_{PE2} = observed PE emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #2 fuel.

E_{PE4} = observed PE emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #4 fuel.

E_{PE6} = observed PE emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #6 fuel.

E_{PEUO} = observed PE emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using used oil.

E_{PENg} = observed PE emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using natural gas.

R_2 = the actual rolling 12-month summation of asphalt produced with #2 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_4 = the actual rolling 12-month summation of asphalt produced with #4 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).



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R_6 = the actual rolling 12-month summation of asphalt produced with #6 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{UO} = the actual rolling 12-month summation of asphalt produced with used oil, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{NG} = the actual rolling 12-month summation of asphalt produced with natural gas, in tons per rolling 12-month period (as derived from records required by d)(2)).

and

$$PE_{SF} = EF_{SF} * (R_{TOT})$$

$$PE_{LO} = EF_{LO} * (R_{TOT})$$

$$PE_{CE} = .0048 * (R_{TOT}) + (.0069) * (R_{AGG}) + (.0021) * (R_{sand})$$

Where

$$EF_{SF} = .000332 + (.00105) * C$$

$$EF_{LO} = .000181 + (0.00141) * C$$

$$C = -V * e^{((.0251)(T+460)-20.43)}; V = .5 \text{ and } T = 325$$

(Emission factors: AP -42, Table 11.1-14 (3/2004))

R_{TOT} = the rolling, 12-month summation of the total asphalt production, in tons, per rolling 12-month period (as derived from records required by d)(2)).

R_{AGG} = the rolling, 12-month summation of the total aggregate throughput, in tons, per rolling 12-month period (as derived from records required by d)(2)).

R_{SAND} = the rolling, 12-month summation of the total sand throughput, in tons, per rolling 12-month period (as derived from records required by d)(2)).

b. Emissions Limitation:

VOC emissions shall not exceed 68.4 tons per rolling, 12-month period.

Applicable Compliance Method:

$$\{[(E_{VOC2})(R_2) + (E_{VOC4})(R_4) + (E_{VOC6})(R_6) + (E_{VOCu0})(R_{u0}) + (E_{VOCNG})(R_{NG})] + [VOC_{SF} + VOC_{LO}]\} / 2000$$

Where:

E_{VOC2} = observed VOC emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #2 fuel.



E_{VOC4} = observed VOC emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #4 fuel.

E_{VOC6} = observed VOC emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #6 fuel.

E_{VOCUO} = observed VOC emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using used oil.

E_{VOCNG} = observed VOC emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using natural gas.

R_2 = the actual rolling 12-month summation of asphalt produced with #2 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_4 = the actual rolling 12-month summation of asphalt produced with #4 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_6 = the actual rolling 12-month summation of asphalt produced with #6 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{UO} = the actual rolling 12-month summation of asphalt produced with used oil, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{NG} = the actual rolling 12-month summation of asphalt produced with natural gas, in tons per rolling 12-month period (as derived from records required by d)(2)).

$$VOC_{SF} = EF_{VOC_{SF}} * (R_{TOT})$$

$$VOC_{LO} = EF_{VOC_{LO}} * (R_{TOT})$$

Where:

$$EF_{VOC_{SF}} = (.0504) * C$$

$$EF_{VOC_{LO}} = (0.0172) * C$$

$C = (-V) * e^{((.0251)(T+460)-20.43)}$; V=default asphalt volatility factor=-.5 and T=default HMA temperature (T) = 325

(Emission factors: AP -42, Table 11.1-14 and 11.1-16(3/2004)

R_{TOT} = the rolling, 12-month summation of the total asphalt production, in tons, per rolling 12-month period (as derived from records required by d)(2)).

c. Emissions Limitation:

CO emissions shall not exceed 79.03 tons per rolling, 12-month period.



Applicable Compliance Method:

$$\frac{\{(E_{CO_2})(R_2)+(E_{CO_4})(R_4)+(E_{CO_6})(R_6)+(E_{CO_{UO}})(R_{UO})+(E_{CONG})(R_{NG})\} + [CO_{SF}+CO_{LO}]}{2000}$$

Where:

E_{CO_2} =observed CO emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #2 fuel.

E_{CO_4} = observed CO emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #4 fuel.

E_{CO_6} = observed CO emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using #6 fuel.

$E_{CO_{UO}}$ = observed CO emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using used oil.

E_{CONG} = observed CO emission rate from the most recent emissions testing, in pound per ton of asphalt produced while using natural gas.

R_2 = the actual rolling 12-month summation of asphalt produced with #2 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_4 = the actual rolling 12-month summation of asphalt produced with #4 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_6 = the actual rolling 12-month summation of asphalt produced with #6 fuel, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{UO} = the actual rolling 12-month summation of asphalt produced with used oil, in tons per rolling 12-month period (as derived from records required by d)(2)).

R_{NG} = the actual rolling 12-month summation of asphalt produced with natural gas, in tons per rolling 12-month period (as derived from records required by d)(2)).

$$CO_{SF} = EF_{COSF} *(R_{TOT})$$

$$CO_{LO} =EF_{COLO} *(R_{TOT})$$

Where:

$$EF_{COSF} = (.00488)*C$$

$$EF_{COLO} = (0.00558)*C$$

$C=(-V)*e^{(.0251)(T+460)-20.43}$; V=default asphalt volatility factor=-.5 and T=default HMA temperature (T) = 325



(Emission factors: AP -42, Table 11.1-14 (3/2004))

R_{TOT} = the rolling, 12-month summation of the total asphalt production, in tons, per rolling 12-month period (as derived from records required by d)(2)).

d. Emissions Limitation:

SO₂ emissions shall not exceed 43.50 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by calculating the emissions using the equation in c)(2)b. (as derived from the records required by d)(2)).

e. Emissions Limitation:

NO_x emissions shall not exceed 34.8 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of NO_x per ton of asphalt produced for each fuel, by the actual rolling 12-month summation of asphalt produced for each fuel, in tons per rolling 12-month period (as derived from the records required by d)(2)), summing the results for all fuels, and dividing by 2,000.

f. Emissions Limitation:

There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.

Applicable Compliance Method:

Visible particulate emissions shall be determined according to USEPA Method 22 as required in f)(1)j.

g. Emissions Limitation:

Visible emissions from any fugitive dust source shall be less than or equal to 10 percent opacity, as a 3-minute average.

Applicable Compliance Method:

Visible particulate emissions shall be determined according to USEPA Method 9 as required in f)(1)j.

h. Emissions Limitation:

Visible emissions from the stack shall not exceed 20 percent opacity as a 3-minute average.



Applicable Compliance Method:

Visible particulate emissions shall be determined according to USEPA Method 9 as required in f)(1)j.

i. Emissions Limitations:

NO_x emissions while burning natural gas shall not exceed 0.055 pound per ton of asphalt produced.

NO_x emissions while burning on-spec used oil or # 2 fuel oil shall not exceed 0.10 pound per ton of asphalt produced.

NO_x emissions while burning on-spec used oil or # 4 fuel oil or # 6 fuel oil, shall not exceed 0.12 pound per ton of asphalt produced.

SO₂ emissions while burning natural gas shall not exceed 0.021 pound per ton of asphalt produced.

SO₂ emissions while burning on-spec used oil or # 2 fuel oil shall not exceed 0.10 pound per ton of asphalt produced.

SO₂ emissions while burning #4 fuel oil shall not exceed 0.11 pound per ton of asphalt produced.

SO₂ emissions while burning # 6 fuel oil shall not exceed 0.15 pound per ton of asphalt produced.

SO₂ emissions while employing slag in the mix shall not exceed 0.53 pound per ton of slag while burning any approved permitted fuel.

CO emissions while burning any approved fuel shall not exceed 0.27 pound per ton of asphalt produced.

VOC emissions while burning any approved fuel shall not exceed 0.22 pound per ton of asphalt produced.

PE while burning any approved fuel shall not exceed 0.03 gr/dscf.

Applicable Compliance Method: Demonstration of compliance with these emissions limits shall be determined from the results of the required emissions testing in f)(1)j.

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

i. The emission testing shall be conducted within 60 days after achieving the maximum production rate for the primary fuel but no later than 180 days after initial startup of the emissions unit. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel.



ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂ for the primary fuel. Prior to secondary fuel emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.

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

PE, Methods 1-5, 9 and 22 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, 25A, 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). In lieu of this the permittee shall convert the mass emission value from VOC as carbon to VOC using the molecular weight of propane, i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC emission rate observed during testing (in lbs./hr.) by 44 (propane) and dividing by 36 (3 atoms of carbon).

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 this emissions unit is operating at or near its maximum capacity and burning natural gas, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or on-spec used oil for PE, VOC, CO, NO_x and SO₂ and employing RAP to verify VOC emissions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire



data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

(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 emission 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)(2)) in the "Recent Stack Test Basis Values" column.

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

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for 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.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 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.

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



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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.

- (3) The concentrations of contaminants (arsenic, barium, cadmium, chromium, lead, mercury, PCBs, and total halogens) in the used oil shall be analyzed using a "total constituent analysis" method, as specified in U.S. EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." The applicable test methods that should be used are as follows:

Arsenic, barium, cadmium, chromium, and lead: SW-846, Method 3031 or 3051 (digestion procedures) followed by analysis using Method 6010B or 6020;
Mercury: SW-846, Method 7471A;

PCBs: SW-846, Method 8270C or 8082; and

Total halogens: SW-846, Method 9075, 9076, or 9077.

The permittee shall submit a written request and receive approval from Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control, of Central Office, before an alternative test method, not listed above, can be used for the total constituent analysis of the above-mentioned used oil contaminants.

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.

Source Number	Source Description	NSPS Regulation (Subpart)
P908	450 ton/hr asphalt plant	Subpart I

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

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

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



- c. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility.

- (2) Burner Tuning Form (see next page)
- (3) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified Federally Enforceable permit-to-install and operate (FEPTIO) 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 toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.

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)			

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: