



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

1/31/2013

**Certified Mail**

Dan Crago  
VALLEY ASPHALT  
11641 MOSTELLER RD  
CINCINNATI, OH 45241

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)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

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

Facility ID: 1431400140  
Permit Number: P0112220  
Permit Type: Administrative Modification  
County: Hamilton

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 Cincinnati Enquirer. 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](http://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 Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219

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 Southwest Ohio Air Quality Agency at (513)946-7777.

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  
SWOQA; Indiana; Kentucky





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This federally enforceable permit to install and operate (FEPTIO) is an Administrative Modification for a 450 ton per hour portable drum mix asphalt plant (P906) using natural gas, No. 2 fuel oil or recyclable on-specification fuel oil. The facility has requested an increase in the allowable VOC emissions based on the results of stack testing performed on 6/10/2010.

3. Facility Emissions and Attainment Status:

The facility is located in Hamilton County which is currently designated non-attainment for the 8-hour ozone standard and attainment for all other criteria pollutants. This facility will be a synthetic minor for carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) as the annual emission rates for these pollutants will exceed Title V thresholds and for CO for purposes of avoiding Prevention of Significant Deterioration (PSD) requirements if the unit operates at 8760 hours per year. The facility will accept a production limitation of 800,000 tons per year to avoid Title V and PSD permit requirements.

4. Source Emissions:

Source emissions are as follows:

Total stack and fugitive Emissions: PE: 17.4 TPY; PM<sub>10</sub>: 12.48 TPY; SO<sub>2</sub>: 26.4 TPY; NO<sub>x</sub>: 22.0 TPY; CO: 53.01 TPY and VOC: 25.74 TPY.

5. Conclusion:

The federally enforceable terms and conditions of this permit will assure that Valley Asphalt Corporation remains in compliance with the applicable emission limitations set forth in this permit. This PTIO includes Operational Restrictions, Record keeping and Monitoring Requirements, Reporting Requirements and emission compliance demonstration requirements which will allow the facility to determine compliance with the synthetic minor limitations for emissions unit P906. As a result, Valley Asphalt Corporation will be a synthetic minor facility with respect to both Title V and PSD requirements.

6. Please provide additional notes or comments as necessary:

None

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



**Permit Strategy Write-Up**  
VALLEY ASPHALT  
**Permit Number:** P0112220  
**Facility ID:** 1431400140

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	17.4
PM10	12.48
CO	53.01
NOx	22.0
SO2	26.4
VOC	25.74

PUBLIC NOTICE  
1/31/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

VALLEY ASPHALT  
11641 MOSTELLER RD,  
Sharonville, OH 45241

Hamilton County

FACILITY DESC.: Asphalt Paving Mixture and Block Manufacturing

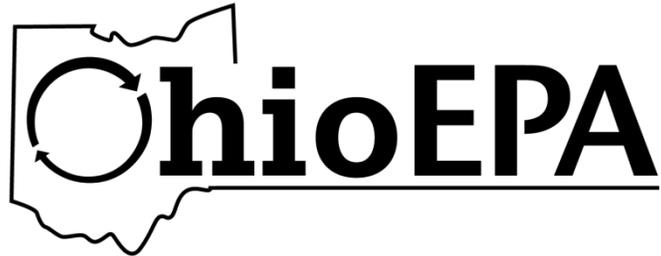
PERMIT #: P0112220

PERMIT TYPE: Administrative Modification

PERMIT DESC: Administrative modification to increase permitted VOC emissions following a stack test.

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: Bonnie Pray, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
VALLEY ASPHALT**

Facility ID:	1431400140
Permit Number:	P0112220
Permit Type:	Administrative Modification
Issued:	1/31/2013
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  
VALLEY ASPHALT**

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**Draft Permit-to-Install**  
Valley Asphalt  
**Permit Number:** P0112220  
**Facility ID:** 1431400140

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

## Authorization

Facility ID: 1431400140  
Application Number(s): A0046364  
Permit Number: P0112220  
Permit Description: Administrative modification to increase permitted VOC emissions following a stack test.  
Permit Type: Administrative Modification  
Permit Fee: \$625.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 1/31/2013  
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:

VALLEY ASPHALT  
11641 MOSTELLER RD  
Sharonville, OH 45241

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:

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

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**  
Valley Asphalt  
**Permit Number:** P0112220  
**Facility ID:** 1431400140

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

## Authorization (continued)

Permit Number: P0112220

Permit Description: Administrative modification to increase permitted VOC emissions following a stack test.

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

<b>Emissions Unit ID:</b>	<b>P906</b>
Company Equipment ID:	Bituminous Asphalt Plant
Superseded Permit Number:	P0105322
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install**  
Valley Asphalt  
**Permit Number:** P0112220  
**Facility ID:** 1431400140  
**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 Southwest Ohio Air Quality Agency 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 submitting<sup>1</sup> 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

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<sup>1</sup>Permittees 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).



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.

**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**  
Valley Asphalt  
**Permit Number:** P0112220  
**Facility ID:** 1431400140  
**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**  
Valley Asphalt  
**Permit Number:** P0112220  
**Facility ID:** 1431400140  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P906, Bituminous Asphalt Plant**

**Operations, Property and/or Equipment Description:**

450 TPH Portable Drum Mix Asphalt Plant No.24

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., b)(1)c., c)(2), d)(2), e)(1), f)(1)i. thru n. and f)(3).

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)	<p>Particulate Emissions (PE) from the baghouse exhaust shall not exceed 0.03 gr/dscf while burning any fuel.</p> <p>Particulate matter emissions 10 microns and less in diameter (PM10) from the fabric filter exhaust stack shall not exceed 0.023 pound/ton of asphalt produced while burning any fuel.</p> <p>Sulfur Dioxide (SO2) emissions shall not exceed 0.011 pound/ton of asphalt produced while burning natural gas.</p> <p>Sulfur Dioxide (SO2) emissions shall not exceed 0.066 pound/ton of asphalt produced while burning No.2 fuel and</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>waste oil.</p> <p>Nitrogen Oxide (NOx) emissions shall not exceed 0.026 pound/ton of asphalt produced while burning natural gas.</p> <p>Nitrogen Oxide (NOx) emissions shall not exceed 0.055 pound/ton of asphalt produced while burning No.2 fuel and waste oil.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.13 pound/ton of asphalt produced while burning any fuel.</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 0.048 pound/ton of asphalt produced while burning any fuel.</p> <p><u>Asphalt Load Out Emissions</u> CO emissions shall not exceed 0.54 ton per rolling, 12-month period.</p> <p>OC emissions shall not exceed 1.66 tons per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.21 ton per rolling, 12-month period.</p> <p><u>Asphalt Silo Filling Emissions</u> CO emissions shall not exceed 0.47 ton per rolling, 12-month period.</p> <p>OC emissions shall not exceed 4.88 tons per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.23 ton per rolling, 12-month period.</p> <p><u>Cold End Fugitive Dust Emissions</u> Fugitive PE/PM10 emissions associated with the cold aggregate, sand and RAP</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 5.52 tons per rolling, 12-month period for PE and 2.84 tons per rolling, 12-month period for PM10.
b.	OAC rule 3745-31-05(D)	<p>Particulate Emissions (PE) shall not exceed 11.44 tons per year based on a rolling, 12-month summation.</p> <p>Particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 9.2 tons per year based on a rolling, 12-month summation.</p> <p>Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 26.4 tons per year based on a rolling, 12-month summation.</p> <p>Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 22.0 tons per year based on a rolling, 12-month summation.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 52.0 tons per year based on a rolling, 12-month summation.</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 19.2 tons per year based on a rolling, 12-month summation.</p> <p>See c)(2).</p>
c.	40 CFR Part 60 Subpart I	<p>The gr/dscf limitation specified by this rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T).</p> <p>Visible particulate emissions from the stack serving this emissions unit shall not exceed twenty percent opacity as six-minute average.</p>
d.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR Part 60,



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Subpart I.
e.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty percent opacity as a three-minute average.
f.	OAC rule 3745-17-08(B)	<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 elevator loading area.</p> <p>The aggregate loaded into the storage bins shall have moisture content sufficient to eliminate the visible emissions of fugitive dust from the elevator and the transfer point to the dryer.</p>
g.	OAC rule 3745-17-11(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T).
h.	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T).
i.	OAC rule 3745-15-07	See b)(2)a., c)(1), c)(4), d)(1), d)(3), e)(2), e)(5), and f)(4).

(2) Additional Terms and Conditions

- a. 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 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:

Property/Contaminant Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum



chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	less than 1,000 ppm; or less than 4,000 ppm if the presumption that the used oil contains hazardous waste is rebutted, as described below
flash point	100°F, minimum

The used oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3, and also shall not exceed the following mercury limitation nor fall below the following heating value:

PCBs	less than 2 ppm
heat content	135,000 Btu/gallon, minimum
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, 3<sup>rd</sup> (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.

- b. Application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

c) Operational Restrictions

- (1) The permittee may not receive or burn any used oil which does not meet the standards in OAC rule 3745-279-11 and the specifications listed in this permit without first obtaining a permit-to-install or permit-to-install and operate 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 maximum annual production rate for this emissions unit shall not exceed 800,000 tons, based upon a rolling, 12-month summation of the production rates.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit.

- (3) This emissions unit shall only use natural gas, No.2 fuel oil or on-specification recycled oil as fuel.

- (4) The permittee may not substitute other raw materials (such as shingles, slag, and/or rubber) for the aggregate and/or RAP raw material mix in this emissions unit without prior approval from Ohio EPA.

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 asphalt production rate for each month;
  - b. the rolling, 12-month summation of the asphalt production rates; and



- c. the rolling, 12-month summation of the PE, PM10, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO emissions.
- (3) 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.
- (4) 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (5) 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).

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.

The acceptable range for the pressure drop across the baghouse is 1.0 to 6.0 inches of water.

- (6) 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.

e) Reporting Requirements

- (1) 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. the maximum annual production rate for this emissions unit shall not exceed 800,000 tons, based upon a rolling, 12-month summation of the production rates;
  - ii. any exceedance of the rolling, 12-month summation of mass emission limitation rates;
- 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) 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.

- (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.
- (4) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - c. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (5) The permittee shall identify in the semi-annual 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.

These semiannual reports shall be submitted by July 31 and January 31 of each year, and shall cover the records for the previous semiannual periods.



- (6) The permittee shall identify in the PER the following information concerning the fuel burned and/or raw material mix used in this emissions unit:
    - a. The permittee shall submit deviation (excursion) reports that identify:
      - i. each day when a fuel other than the following: natural gas, number two fuel oil, and on-specification recycled oil were burned in this emissions unit; and
      - ii. each day when other than aggregate and/or RAP is used in the raw material feed mix in this emissions unit
  - (7) The permittee shall identify the following information in the PER in accordance with the monitoring requirements for visible emissions in d)(4) above:
    - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
    - b. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
    - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive particulate emissions.
- 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 Limitation:

Particulate Emissions (PE) from the baghouse exhaust shall not exceed 0.03 gr/dscf while burning any fuel.

Applicable Compliance Method:

Compliance shall be determined by the requirements listed in f)(2).
    - b. Emission Limitation:

Particulate matter emissions 10 microns and less in diameter (PM10) from the fabric filter exhaust stack shall not exceed 0.023 pound/ton of asphalt produced while burning any fuel.



Applicable Compliance Method:

Compliance shall be determined by the requirements listed in f)(2).

c. Emission Limitation:

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.011 pound/ton of asphalt produced while burning natural gas.

Applicable Compliance Method:

Compliance shall be determined by the requirements listed in f)(2).

d. Emission Limitation:

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.066 pound/ton of asphalt produced while burning No.2 fuel and waste oil.

Applicable Compliance Method:

Compliance shall be determined by the requirements listed in f)(2).

e. Emission Limitation:

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.026 pound/ton of asphalt produced while burning natural gas.

Applicable Compliance Method:

The emission factor was taken from AP-42 Table 11.1-7. Compliance shall be determined by the requirements listed in f)(2).

f. Emission Limitation:

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.055 pound/ton of asphalt produced while burning No.2 fuel and waste oil.

Applicable Compliance Method:

The emission factor was taken from AP-42 Table 11.1-7. Compliance shall be determined by the requirements listed in f)(2).

g. Emission Limitation:

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound/ton of asphalt produced while burning any fuel.



Applicable Compliance Method:

The emission factor was taken from AP-42 Table 11.1-7. Compliance shall be determined by the requirements listed in f)(2).

h. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 0.048 pound/ton of asphalt produced while burning any fuel.

Applicable Compliance Method:

The volatile organic compound limitation is based on stack test data. Compliance shall be determined by the requirements listed in f)(2).

i. Emission Limitation:

Particulate Emissions (PE) shall not exceed 11.44 tons per year based on a rolling, 12-month summation.

Fugitive Particulate Emissions (PE) shall not exceed 5.96 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method

The PE limitations of the stack and the fugitive emissions were determined as follows:

Stack Emissions:

The particulate emission limitation was based upon both the maximum hourly production rate of the asphalt plant and a 0.03 grain loading at 50,000 dscf per min flow rate that resulted in an emission factor of 0.0286 lb/ton, times the maximum tonnage per year of 800,000 TPY and then divided by 2000 lb/ton.

$$0.0286 \text{ lb/ton} \times 800,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} = 11.44 \text{ tons per year}$$

Fugitive Emissions:

Compliance shall be calculated based upon the following worst case calculations (Cold end PE/PM10 Emission factors based on AP-42, 5th Edition, Table 11.12-2, 06/2006):

Fugitive emissions of PE from the cold end are calculated as follows:

Hopper loading:

$$800,000 \text{ tons of material/year} \times 0.0048 \text{ lb of PE/ton of material} = 3840 \text{ lbs of PE/yr.}$$



Aggregate transfer:

800,000 tons of aggregate/year X 0.0069 lb of PE/ton of aggregate = 5520 lbs of PE/yr.

Sand transfer:

800,000 tons of sand/year X 0.0021 lb of PE/ton of sand = 1680 lbs of PE/yr; and

The sum of the above is 11040 lbs of PE/yr X 1 ton/2000 lbs = 5.52 tons of PE; and

Hot end emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out Emission Factors based on AP-42, Fifth Edition, Table 11.1-14, dated 3/2004.

Known:

V = -0.5 Asphalt volatility factor (default)

T = 325 HMA mix temp (F) (default)

Activity/Pollutant Predictive Emission Factor Equation, lb/ton

Silo filling PE EF =  $0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

Load out PE EF =  $0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

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

Activity/Pollutant	lb/ton	tons/yr (at 800,000 tons/yr production)
Silo filling PE	$5.86 \times 10^{-4}$	0.23
Load out PE	$5.22 \times 10^{-4}$	0.21

The PM10 emissions are assumed equivalent to the PE.

Sum the Cold End PE and the Hot End PE to get the Total Fugitive PE/PM10 emissions as follows: 5.52 TPY + 0.23 TPY + 0.21 TPY = 5.96 TPY fugitive PE.

j. Emission Limitation:

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 9.2 tons per year based on a rolling, 12-month summation.



Fugitive Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 3.28 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

The PM10 emission limitations of the stack and the fugitive emissions which were determined as follows:

Stack Emissions:

The particulate emission 10 microns and less in diameter limitation was calculated by taking the emission factor from AP-42 Table 11.1-3 (0.023 lb/ton), times the maximum tonnage per year (800,000 TPY) and then divided by 2000 lb/ton.

$$0.023 \text{ lb/ton} \times 800,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} = 9.2 \text{ tons per year}$$

Fugitive Emissions:

Compliance shall be calculated based upon the following worst case calculations (Cold end PE/PM10 Emission factors based on AP-42, 5th Edition, Table 11.12-2, 06/2006):

Fugitive emissions of PM10 from the cold end are calculated as follows:

Hopper loading:

$$800,000 \text{ tons of material/year} \times 0.0028 \text{ lb of PM10/ton of material} = 2240 \text{ lbs of PM10/yr.}$$

Aggregate transfer:

$$800,000 \text{ tons of aggregate/year} \times 0.0033 \text{ lb of PM10/ton of aggregate} = 2640 \text{ lbs of PM10/yr.}$$

Sand transfer:

$$800,000 \text{ tons of sand/year} \times 0.00099 \text{ lb of PM10/ton of sand} = 792 \text{ lbs of PM10/yr.}$$

The sum of the above is 5672 lbs of PM10/yr X 1 ton/2000 lbs = 2.84 tons of PM10.

Hot end emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out Emission Factors based on AP-42, Fifth Edition, Table 11.1-14, dated 3/2004.



Known:

V = -0.5 Asphalt volatility factor (default)

T = 325 HMA mix temp (F) (default)

Activity/Pollutant Predictive Emission Factor Equation, lb/ton

Silo filling PE EF =  $0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$

Load out PE EF =  $0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$

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

Activity/Pollutant	lb/ton	tons/yr (at 800,000 tons/yr production)
Silo filling PE	$5.86 \times 10^{-4}$	0.23
Load out PE	$5.22 \times 10^{-4}$	0.21

The PM10 emissions are assumed equivalent to the PE.

Sum the Cold End PM10 emissions and the Hot End PM10 emission to get the Total Fugitive PM10 emissions as follows: 2.84 TPY + .23 TPY + .21 TPY = 3.28 TPY PM10.

k. Emission Limitation:

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 26.4 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

$0.066 \text{ lb/ton} \times 800,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} = 26.4 \text{ tons per year}$  based on a rolling, 12-month summation

l. Emission Limitation:

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 22.0 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

The nitrogen oxide limitation was calculated by taking the emission factor from AP-42 Table 11.1-7, waste-oil fired dryer, (0.055 lb/ton), times the maximum tonnage per year (800,000 TPY) and then divided by 2000 lb/ton.



0.055 lb/ton x 800,000 tons/year x 1 Ton/2000 lbs = 22.0 tons per year based on a rolling, 12-month summation

m. Emission Limitation:

Carbon Monoxide (CO) emissions shall not exceed 52.0 tons per year based on a rolling, 12-month summation.

Fugitive Carbon Monoxide (CO) emissions shall not exceed 1.01 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

The CO emission limitations of the stack and the fugitive emissions which were determined as follows:

Stack Emissions:

The carbon monoxide limitation was calculated by taking the emission factor from AP-42 Table 11.1-7, waste-oil fired dryer, (0.13 lb/ton), times the maximum tonnage per year (800,000 TPY) and then divided by 2000 lb/ton.

0.13 lb/ton x 800,000 tons/year x 1 Ton/2000 lbs = 52.0 tons per year

Fugitive Emissions:

Hot end CO emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out Emission Factors based on AP-42, Fifth Edition, Table 11.1-14, dated 3/2004.

Known:

V = -0.5 Asphalt volatility factor (default)

T = 325 HMA mix temp (F) (default)

Activity Pollutant Predictive Emission Factor Equation, lb/ton

Silo filling COEF =  $0.00488(-V)^{((0.0251)(T+460)-20.43)}$

Load out COEF =  $0.00558(-V)^{((0.0251)(T+460)-20.43)}$



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

Activity/Pollutant	lb/ton	tons/yr (at 800,000 tons/yr production)
Silo filling CO	$1.18 \times 10^{-3}$	0.47
Load out CO	$1.35 \times 10^{-3}$	0.54

Sum the Hot End CO emissions (silo filling + load out) to get the total fugitive CO emissions as follows: 0.47 TPY + 0.54 TPY = 1.01 TPY based on a rolling, 12-month summation

n. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 19.2 tons per year based on a rolling, 12-month summation.

Fugitive Volatile Organic Compound (VOC) emissions shall not exceed 6.54 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

The VOC emission limitation is the sum of the stack emissions and the fugitive emissions which were determined as follows:

Stack Emissions:

The volatile organic compound limitation was calculated by taking the emissions from the most recent stack test (0.042 lb/ton + 15% = 0.048 lb/ton), times the maximum tonnage per year (800,000 TPY) and then divided by 2000 lbs/ton.

$$0.048 \text{ lb/ton} \times 800,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} = 19.2 \text{ tons per year}$$

Fugitive Emissions:

Hot end VOC emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out Emission Factors based on AP-42, Fifth Edition, Table 11.1-14, dated 3/2004.

Known:

V = -0.5 Asphalt volatility factor (default)

T = 325 HMA mix temp (F) (default)



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

Activity/Pollutant Predictive Emission Factor Equation, lb/ton

Silo filling VOC  $EF = 0.0504(-V)e^{((0.0251)(T+460)-20.43)}$

Load out VOC  $EF = 0.0172(-V)e^{((0.0251)(T+460)-20.43)}$

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

Activity/Pollutant	lb/ton	tons/yr (at 800,000 tons/yr production)
Silo filling VOC	$1.22 \times 10^{-2}$	4.88
Load out VOC	$4.16 \times 10^{-3}$	1.66

Sum the hot end VOC emissions (silo filling + load out) to get the total fugitive OC emissions as follows: 4.88 TPY + 1.66 TPY = 6.54 TPY VOC based on a rolling, 12-month summation.

o. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible particulate emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA, Method 9.

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

- a. The emission testing shall be conducted within 6 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, PM 10, NOX, VOC, SO2 and CO, in the appropriate averaging period(s)
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

PE/PM 10 – Methods 1-5 of 40 CFR Part 60, Appendix A.

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



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

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

SO<sub>2</sub> – Methods 1-4 and 6 or 6c of 40 CFR Part 60, Appendix A.

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

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average shall be determined by appropriate methods listed in NSPS, Subpart I.

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

- f. 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 or on-spec used oil for PE, PM 10, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

- g. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- h. 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.

- i. 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.

- (3) Production rate Limitation:

The maximum annual production rate for this emissions unit shall not exceed 800,000 tons, based upon a rolling, 12-month summation of the production rates.



Applicable Compliance Method:

Compliance with the production rate limitation in c)(2) will be determined by the record keeping requirements in d)(2).

- (4) 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.

- a. 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.

(5) 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<sub>x</sub>, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of 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<sub>x</sub>, 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:

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacture's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O<sub>2</sub>, NO<sub>x</sub>, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *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 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 permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a "Notice of Site Approval" if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):
  - a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
  - b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
  - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or



local air agency that has issued the effective current permit) prior to the scheduled relocation;

- d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
- e. the Director has issued a "Notice of Site Approval", stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

- (3) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified federally enforceable permit-to-install and operate 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 federally enforceable permit-to-install and operate.
- (4) Burner Tuning Form (see next page)



## 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    No. 2 Fuel Oil    No. 4 Fuel Oil    Used Oil    Other (describe)

### Tuning Results:

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

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

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

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

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.

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Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, 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: