



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

5/27/2010

Anthony Ruggiero, III  
Mar-Zane, Inc. Plant #13  
3570 South River Road  
Zanesville, OH 43701

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0660000081  
Permit Number: P0105425  
Permit Type: OAC Chapter 3745-31 Modification  
County: Guernsey

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

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 EPA Weekly Review and the local newspaper, The Daily Jeffersonian. 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 "Issued Air Pollution Control Permits" link. 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, Southeast District Office  
2195 Front Street  
Logan, OH 43138

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 in writing 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, Southeast District Office at (740)385-8501.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA-SEDO; Pennsylvania; West Virginia





Permit Strategy Write-Up

1. Check all that apply:

[X] Synthetic Minor Determination

[ ] Netting Determination

2. Source Description:

Mar-Zane #13 is a portable double drum counter flow hot mix asphalt plant. The plant currently has a production limit of 300,000 tons of HMA per rolling, 12-month summation which was established in PTIO P0104276. This permit will allow Mar-Zane to begin using a mixture of fuel oil and coal or a mixture of natural gas and coal.

3. Facility Emissions and Attainment Status:

Mar-Zane #13 is currently located in Byesville (Guernsey County), but permitted from Muskingum County, which is in attainment for all criteria pollutants.

4. Source Emissions:

The facility is proposing to limit their PTE below Title V thresholds by maintaining the production limit of 300,000 tons of HMA per rolling 12-months and by adding calcium hydroxide (lime) to the pulverized coal being introduced into the burner in order to limit the sulfur dioxide emissions. Rates of application of the lime to the process have been included in this permit's terms and conditions based on the predicted stoichiometry of the chemical reaction; however, testing will need to be completed to determine the if the rates of application are sufficient to maintain compliance. NOx production will be controlled through the use of technology that meets the definition of a low NOx burner. The coal is ignited in a fuel rich area and introduced to the required total mass air as it flows out into the combustion area; thereby, causing the air/fuel charge to be stratified. The lack of refractory also minimizes the formation of thermal NOx. The following table is a summary of the short term and annual allowables as proposed in this permit.

Table with 3 columns: Pollutant, Short Term Allowable (PTIO P0105425), and Annual Allowable (TPY). Rows include PE (stack and fugitive), CO, and SO2 with their respective emission limits.



	0.17 lb/ton (#6) 0.18 lb/ton (#6/coal mix)	
NOx	0.03 lb/ton (NG) 0.19 lb/ton (NG w/ coal) 0.06 lb/ton (#2, #4 or used) 0.08 lbs/ton (#6) 0.28 lbs/ton (#2/coal mix or used/coal mix) 0.27 lb/ton (#4/coal mix or #6/coal mix)	41.29
VOC	0.03 lb/ton (NG, #2, #4, #6 or used) 0.04 lb/ton (#NG/coal mix, #2/coal mix, #4/coal mix, #6/coal mix, or used/coal mix)	5.93

5. Conclusion:

The production limitation, the addition of lime to the coal burner, the low NOx burner, and the monitoring, recordkeeping and reporting required by the terms and conditions of this permit should be sufficient to ensure compliance with the allowable emission rates established in this permit.

6. Please provide additional notes or comments as necessary:

Sulfur dioxide emissions are also being limited to avoid state modeling requirements.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
<u>PE</u>	<u>7.29</u>
<u>PE (fugitive)</u>	<u>2.28</u>
<u>CO</u>	<u>44.9</u>
<u>CO (fugitive)</u>	<u>0.38</u>
<u>SO2</u>	<u>25.5</u>
<u>NOx</u>	<u>41.29</u>
<u>VOC</u>	<u>5.93</u>
<u>VOC (fugitive)</u>	<u>2.4</u>

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
Mar-Zane, Inc. Plant #13

Issue Date: 5/27/2010  
Permit Number: P0105425  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Description: Chapter 31 modification of PTIO P0104276 for F002 and P901 to allow use of coal as fuel in the asphalt plant's burner.  
Facility ID: 0660000081  
Facility Location: Mar-Zane, Inc. Plant #13  
Intersection of County Rd. 35 and Interstate 77,  
Byesville, OH 43723  
Facility Description: Asphalt Paving Mixture and Block Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Cara Cherry at Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138 or (740)385-8501. The permit can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Mar-Zane, Inc. Plant #13**

Facility ID: 0660000081  
Permit Number: P0105425  
Permit Type: OAC Chapter 3745-31 Modification  
Issued: 5/27/2010  
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
Mar-Zane, Inc. Plant #13

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## Authorization

Facility ID: 0660000081

Application Number(s): A0038273, A0038912

Permit Number: P0105425

Permit Description: Chapter 31 modification of PTIO P0104276 for F002 and P901 to allow use of coal as fuel in the asphalt plant's burner.

Permit Type: OAC Chapter 3745-31 Modification

Permit Fee: \$2,500.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 5/27/2010

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:

Mar-Zane, Inc. Plant #13  
Intersection of County Rd. 35 and Interstate 77  
Byesville, OH 43723

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

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

Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0105425

Permit Description: Chapter 31 modification of PTIO P0104276 for F002 and P901 to allow use of coal as fuel in the asphalt plant's burner.

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>F002</b>
Company Equipment ID:	Storage Piles
Superseded Permit Number:	P0104276
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	HMA Plant #13
Superseded Permit Number:	P0104276
General Permit Category and Type:	Not Applicable

## **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, Southeast 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 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.

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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).

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.

**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.

## **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.

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



1. F002, Storage Piles

Operations, Property and/or Equipment Description:

Plant storage piles (portable with Mar-Zane Plant 13). (Maximum throughput of 300,000 tons per year.) This permit is a modification issued per OAC Chapter 3745-31-05 to PTIO P0104276 issued in July 16, 2009, permitting the modification of the aggregate storage piles to accommodate the addition of coal storage at the facility.

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. None.

(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. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 0.45 tons per year.  No visible PE except for 1 minute during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)c. through b)(2)h.).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-17-07(B)(6) (applicable only if this emissions unit	No visible PE except for 13-minutes in



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	is located in an area identified in Appendix A of OAC rule 3745-17-08)	any 60-minute period.
d.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The permittee shall utilize reasonably available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See b)(2)c. through b)(2)h.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the fugitive particulate emissions from this air containment source since the uncontrolled potential to emit for fugitive particulate emissions is less than ten tons per year.
- c. The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-31-05, 3745-17-07(B)(6) and 3745-17-08(B) when located in an area identified in Appendix A of OAC rule 3745-17-08 are listed below:  
  
ALL
- d. The permittee shall employ the best/reasonably available control measures on all load-in and load-out operations associated with storage piles for the purpose of ensuring compliance with the above mentioned applicable requirements. In order to ensure compliance and in accordance with the application, the permittee has committed to maintaining an inherently high moisture content and low pile heights for aggregate and RAP storage piles, and to maintain a bulk material enclosure with concrete walls and a canvas arched cover for coal piles.



- e. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- f. The permittee shall employ best/reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In order to ensure compliance and in accordance with the application, the permittee has committed to maintaining an inherently high moisture content and low pile heights for aggregate and RAP storage piles, and to maintain a bulk material enclosure with concrete walls and a canvas arched cover for coal piles. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- g. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- h. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05-05(A)(3), 3745-17-07 (B)(6) and 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, when this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>Storage pile identification</u>	<u>minimum load-in inspection frequency</u>
ALL	DAILY

- (2) Except as otherwise provided in this section, when this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08, the permittee shall perform

inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>Storage pile identification</u>	<u>minimum load-out inspection frequency</u>
ALL	DAILY

- (3) Except as otherwise provided in this section, when this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each pile in accordance with the following frequencies:

<u>Storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
ALL	DAILY

- (4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

- (6) The permittee shall maintain records of the following information:

- the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- the dates the control measures were implemented; and,
- on a monthly basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in (6)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a monthly basis within 30 days after the end of each month.

## e) Reporting Requirements

- (1) 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.

## f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

No visible PE except for 1 minute during any 60-minute period.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

b. Emission Limitation:

No visible PE except for 13 minute during any 60-minute period.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

c. Emission Limitation:

Fugitive PE shall not exceed 0.45 tons per year.

Applicable Compliance Method:**RAP, Coarse and Fine Aggregate:**

Compliance shall be determined based on the emission factor calculation for drop operations associated with storage piles in AP-42 section 13.2.4 (11/06).

Initial compliance has been determined using inputs representing current conditions as follows:

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

Where:

EF = emission factor expressed in pounds per ton (lbs/ton)

k = particle size multiplier for TSP (dimensionless) = 0.74

U = mean wind speed expressed in miles per hour (MPH) = 7.53

M = material moisture content (%) = 1

Therefore, EF = 0.01064 lbs/ton

maximum annual load-in throughput = 300,000 tons/year

maximum annual load-out throughput = 300,000 tons/year

$$[(1 \text{ load-in})(300,000 \text{ tons/year}) (0.01064 \text{ lb PE/ton}) + (1 \text{ load-outs})(300,000 \text{ tons/year})(0.01064 \text{ lb PE/ton})] / 2,000 \text{lb/ton}$$

$$= 3.192 \text{ TPY of uncontrolled PE}$$

Assume 95% control for watering (engineering estimate of permittee)

(3.192 TPY) (.05) = 0.16 TPY of controlled PE and;

the emission factor calculation for wind erosion from storage piles found in USEPA's Control of Open Fugitive Dust Sources (9/88). Initial compliance has been determined using inputs representing current conditions as follows:

$$EF = (1.7) (s/1.5) ((365-p)/235) (f/15)$$

Where:

E = emission factor in pounds (lbs)/day/acre

s = silt content of road surface material (%) = 10.0%

p = number of rain days per year >0.01 in. = 130

f = percentage of time that wind speed exceeds 12 mph (%) = 12.9

A = total surface area of storage piles (acres) = 3.01

Therefore, EF = 9.7466 lbs/day/acre

$$[(9.7466 \text{ lbs/day/acre})(365 \text{ days/yr})(3.01 \text{ acres})] / 2000 \text{ lbs/ton} = 5.35 \text{ TPY uncontrolled PE}$$

Assume 95% control for watering (engineering estimate of permittee)



(5.35 TPY) (0.05) = 0.27 TPY controlled PE

**Coal:**

Compliance shall be determined based on the emission factor calculation for drop operations associated with storage piles in AP-42 section 13.2.4 (11/06).

Initial compliance has been determined using inputs representing current conditions as follows:

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

Where:

EF = emission factor expressed in pounds per ton (lbs/ton)

k = particle size multiplier for TSP (dimensionless) = 0.74

U = mean wind speed expressed in miles per hour (MPH) = 7.53

M = material moisture content (%) = 4.5

Therefore, EF = 0.0013 lbs/ton

maximum annual load-in throughput = 10,100 tons/year

maximum annual load-out throughput = 10,100 tons/year

$$[(1 \text{ load-in})(10,100 \text{ tons/year}) (0.0013 \text{ lb PE/ton}) + (1 \text{ load-outs})(10,100 \text{ tons/year})(0.0013 \text{ lb PE/ton})] / 2,000 \text{lb/ton}$$

= 0.013 TPY of uncontrolled PE

Assume 30% control for bulk material enclosure with concrete walls and a canvas arched cover and reducing drop heights (engineering estimate of permittee)

(0.013 TPY) (.70) = 0.009 TPY of controlled PE and;

the emission factor calculation for wind erosion from storage piles found in

USEPA's Control of Open Fugitive Dust Sources (9/88). Initial compliance has

been determined using inputs representing current conditions as follows:

$$EF = (1.7) (s/1.5) ((365-p)/235) (f/15)$$

Where:

E= emission factor in pounds (lbs)/day/acre

s = silt content of road surface material (%) = 4.6%

p= number of rain days per year >0.01 in. = 130

f = percentage of time that wind speed exceeds 12 mph (%) = 12.9

A= total surface area of storage piles (acres) = 0.04

Therefore, EF= 4.48 lbs/day/acre

$[(4.48 \text{ lbs/day/acre})(365 \text{ days/yr})(0.04 \text{ acres})]/2000 \text{ lbs/ton} = 0.033 \text{ TPY}$

uncontrolled PE

Assume 75% control for good operating practices (engineering estimate of permittee)

$(0.033 \text{ TPY}) (0.25) = 0.01 \text{ TPY controlled PE}$

#### **TOTAL EMISSION SUMMARY**

Aggregate Load-in and Load-out = 0.16 TPY

Aggregate Wind erosion = 0.27 TPY

Coal Load-in and Load-out = 0.009 TPY

Coal Wind erosion = 0.01

Total emissions = 0.45 TPY

#### **g) Miscellaneous Requirements**

- (1) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install and Operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).
- (2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:
  - a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,

- b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).
- (3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:
- a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;
  - b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
  - c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".

- (4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:
- a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;
  - b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);
  - c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
  - d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;
  - e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also,

pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- (5) 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.
- (6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. 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 (LLL) and (JJJ), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. 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 Chapter 3745-77, which may include the requirement to apply for a Title V permit.



2. P901, HMA Plant #13

Operations, Property and/or Equipment Description:

Portable double drum counterflow mix asphalt plant with a maximum design capacity of 360 tons per hour when burning natural gas and/or fuel oil (including #2, #4, #6, and on-spec used oil) and 335 tons per hour when burning a mixture of natural gas, fuel oil and coal, and controlled with a baghouse, low NOx burner and lime injection system. This permit is a modification issued per OAC Chapter 3745-31-05 to PTIO P0104276 issued in July 16, 2009, permitting the use of coal mixtures as a fuel source, and an increase in allowable emissions.

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)(7).

(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)d, b)(2)e - i, b)(2)j, c)(2), c)(6), d)(2), d)(3), e)(1), f)(1)d, f)(1)e, f)(1)f, f)(1)g, f)(1)h, f)(1)i, and f)(1)j

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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  Sulfur dioxide (SO <sub>2</sub> ) emissions while burning natural gas or a mixture of natural gas and coal shall not exceed 0.01 pounds per ton of hot mix asphalt (HMA).  SO <sub>2</sub> emissions while burning on-spec used oil, number 2 fuel oil, a mixture of on-spec used oil and coal, or a mixture of number 2 fuel oil and coal shall not exceed 0.07 pounds per ton of HMA.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>SO<sub>2</sub> emissions while burning number 4 fuel oil shall not exceed 0.11 pounds per ton of HMA.</p> <p>SO<sub>2</sub> emissions while burning a mixture of number 4 fuel oil and coal shall not exceed 0.12 pounds per ton HMA.</p> <p>SO<sub>2</sub> emissions while burning number 6 fuel oil shall not exceed 0.17 pounds per ton of HMA.</p> <p>SO<sub>2</sub> emissions while burning a mixture of number 6 fuel oil and coal shall not exceed 0.18 pounds per tons of HMA.</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions while burning natural gas shall not exceed 0.03 pounds per ton of HMA.</p> <p>NO<sub>x</sub> emissions while burning #2 fuel oil, #4 fuel oil or on-spec used oil shall not exceed 0.06 pounds per ton of HMA.</p> <p>NO<sub>x</sub> emissions while burning #6 fuel oil shall not exceed 0.08 pounds per ton of HMA.</p> <p>NO<sub>x</sub> emissions while burning a mixture of natural gas and coal shall not exceed 0.19 pounds per ton of HMA.</p> <p>NO<sub>x</sub> emissions while burning a mixture of #2 fuel oil and coal or a mixture of on-spec used fuel oil and coal shall not exceed 0.28 pounds per ton of HMA.</p> <p>NO<sub>x</sub> emissions while burning a mixture of #4 fuel oil and coal or a mixture of #6 fuel oil and coal shall not exceed 0.27 pounds per ton of HMA.</p> <p>Carbon monoxide (CO) emissions while burning natural gas, #2, #4, #6 and used fuel oil shall not exceed 0.13 pounds per tons of HMA.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>CO emissions while burning a mixture of natural gas and coal shall not exceed 0.24 pounds per ton of HMA.</p> <p>CO emissions while burning a mixture of #2 fuel oil and coal , a mixture of #4 fuel oil and coal, a mixture of #6 fuel oil and coal, or on-spec used fuel oil and coal shall not exceed 0.30 pounds per ton of HMA.</p> <p>Particulate emissions (PE) while burning any approved fuel shall not exceed 0.03 gr/dscf. See c)(5).</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compounds (VOCs) while burning natural gas, #2, #4, #6 or on-spec used fuel oil shall not exceed 0.03 pounds per ton of HMA.</p> <p>VOCs while burning a mixture of natural gas and coal, a mixture of #2 fuel oil and coal, a mixture of #4 fuel oil and coal, a mixture of #6 fuel oil and coal, or on-spec used fuel oil and coal shall not exceed 0.04 pounds per ton HMA.</p> <p>See b)(2)a.</p>
d.	OAC rule 3745-31-05 (D) (Synthetic minor to avoid Title V permitting)	<p>Stack Emissions:</p> <p>SO<sub>2</sub> emissions while burning any approved fuel shall not exceed 25.5 tons per rolling, 12-month period.</p> <p>See b)(2)e. through i.</p> <p>CO emissions while burning any approved fuel shall not exceed 44.9 tons per rolling, 12-month period.</p> <p>NOx emissions while burning any approved fuel shall not exceed 41.3 tons per rolling, 12-month period.</p> <p>VOC emissions while burning any approved fuel shall not exceed 5.93 tons</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>per rolling, 12-month period.</p> <p>PE emissions shall not exceed 7.29 tons per rolling, 12-month period.</p> <p><u>Asphalt Load Out Emissions</u></p> <p>Emissions from load out operations shall not exceed 0.20 tons CO per rolling, 12 month period, 0.078 tons PE per rolling, 12-month period and 0.6 tons of VOC per rolling, 12-month period.</p> <p><u>Asphalt Silo Filling Emissions</u></p> <p>Emissions from silo filling operations shall not exceed 0.18 tons CO per rolling, 12 month period, 0.09 tons PE per rolling, 12-month period and 1.8 tons VOC per rolling, 12-month period.</p> <p><u>Cold End Fugitive Dust Emissions</u></p> <p>Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 1.51 tons of fugitive dust per rolling, 12-month period.</p>
e.	OAC rule 3745-21-08(B)	See b)(2)l.
f.	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to ORC 3704.03(T).
g.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average.
h.	OAC rule 3745-17-07(B)(1) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible particulate emissions from any fugitive dust source shall not exceed 20% opacity, as a three-minute average.
i.	OAC rule 3745-17-08 (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The permittee shall utilize reasonably available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)c through d.
j.	40 CFR Part 60, Subpart I	The emissions limitations specified by these rules equivalent to the emission limitations established pursuant to OAC rule 3745-17-07(A)(1).  See b)(2)(m).
k.	OAC rule 3745-15-07	See b)(2)j., c)(1), c)(3), and d)(1)

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOCs) from this air containment source since the calculated annual emission rate for VOCs is less than 10 tons per year taking into account the federally enforceable operational limit of 300,000 tons of HMA per year.
- c. 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.
- d. 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.
- e. All number 2 and on-spec used oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5 percent, by weight.
- f. All number 4 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.8 percent, by weight.



- g. All number 6 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 1.0 percent, by weight.
- h. All coal burned in this emissions unit shall have a sulfur content equal to or less than 2.25 percent, by weight.
- i. In accordance with the permittee’s application, when burning coal and an auxiliary fuel, the permittee will control sulfur dioxide emissions by adding calcium hydroxide to the coal pulverizer. Calcium hydroxide shall be applied at a rate of:
  - i. 0.075 pounds of calcium hydroxide per pound of coal when firing natural gas as the auxiliary fuel;
  - ii. 0.008 pounds of calcium hydroxide per pound of coal when firing number 2 fuel oil as the auxiliary fuel;
  - iii. 0.048 pounds of calcium hydroxide per pound of coal when firing number 4 fuel oil as the auxiliary fuel;
  - iv. 0.049 pounds of calcium hydroxide per pound of coal when firing number 6 fuel oil as the auxiliary fuel; and,
  - v. 0.0671 pounds of calcium hydroxide per pound of coal when firing on-spec used oil as the auxiliary fuel.

\*Application rates may be revised based upon Ohio EPA validated emissions testing.

- j. 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:

Contaminant/Property	Allowable Specifications
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 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
Lead	100 ppm, maximum



flash point	100°F, minimum
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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:

heat content	135,000 Btu/gallon, minimum
PCB's	less than 2 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, 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

- k. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to ORC 3704.03(T) in this permit-to-install and operate.
- l. On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- m. 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 emissions 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 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 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 300,000 tons per rolling, 12-month period. The permittee has sufficient records to demonstrate compliance with the asphalt production limitation upon permit issuance.
  - b. The amount of asphalt produced and the SO<sub>2</sub> emissions are restricted by the following equation:

$$25.5 \text{ tons per rolling, 12-month period} \geq (0.011)(w) + (0.066)(x) + (0.11)(y) + (0.17)(z) + (0.012)(a) + (0.071)(b) + (0.12)(c) + (0.18)(d)/2,000$$

Where:

w = Tons asphalt produced with natural gas per rolling, 12-month period

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

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

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

a= Tons asphalt produced with coal and natural gas fuel mixture per rolling, 12-month period

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

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

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

\*Factors may be revised based upon Ohio EPA validated emissions testing and shall be revised if emissions testing results demonstrate higher emissions.

- (3) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in the raw material feed mix in amounts not to exceed 50 percent of each asphalt mix produced. The permittee shall only use virgin aggregate, asphalt shingles, and/or RAP in the raw material feed mix. For the purposes of this permit virgin aggregate shall be clean, uncontaminated quarried material. The permittee may not substitute materials such as rubber, shredded tires, etc. without prior written approval from Ohio EPA. Issuance of this permit does not constitute prior approval. If the permittee wishes to use materials other than virgin aggregate and RAP in the asphalt mix, then they must contact Ohio EPA.

Asphalt shingles removed from buildings (tear-off material) may be used but only if it has been determined that they do not contain asbestos. 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 supplier that the shingles do not contain asbestos. Records shall be kept documenting the asbestos verification of any shingles used in the feed mix consistent with the language requirements in the standard terms and conditions.

- (4) The permittee shall only burn natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, on-spec used oil, and/or coal mixtures in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per paragraph f)(1)c.
- (5) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
- (6) The permittee shall maintain free flowing calcium hydroxide in the hopper to the feed device at all times and maintain the calcium hydroxide application rate at the levels listed in b)(2)i. or as established during the performance test.

## 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 records of the following information:
- a. the total asphalt production, in tons, for each month;
  - b. the total asphalt produced, in tons, for each fuel type for each month;

- c. the amount, in percent, of RAP and/or shingles applied in each mix type;
- 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, SO<sub>2</sub>\*, NO<sub>x</sub>, VOC, and CO emissions;
- f. the raw material composition for each mix type; and,
- g. the total amount (in pounds per hour) of calcium hydroxide added to the coal pulverizer for each coal/auxiliary fuel mix type.

\*The rolling, 12-month summation of SO<sub>2</sub> shall be calculated by using the equation in c)(2)b.

- (3) For each shipment of number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, on-spec used oil, and coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat 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 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.
  - f. 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 maintain documentation verifying that any shingles employed do not contain asbestos as described in c)(3).
- (6) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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;
- c. The dates the investigation was conducted;
- d. The names 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 below, 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 correction action taken:

- a. A description of the corrective action;
- b. The date it was completed;
- c. The date and time the deviation ended;
- d. The total period of time (in minutes) during which there was a deviation;
- e. The pressure drop reading immediately after the corrective action, and
- f. The names of the personnel who performed the work.

Investigation and records required by this paragraph does 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 2 to 8 inches of water.

This range 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 range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means or an administrative modification.

- (7) The permittee shall maintain hourly records of the application rate of the calcium hydroxide to the coal pulverizer, in pounds of calcium hydroxide per pound of coal.
- (8) The permittee shall inspect the feed hopper at least once every eight hours. If the calcium hydroxide is not free flowing then inspections shall be increased to once every four hours for the next three days. Inspection frequency may return to once every eight hours once there are three days without any blockages.

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. all exceedances of the rolling 12-month asphalt production limitation;
    - ii. all exceedances of the rolling, 12-month SO<sub>2</sub>, CO, NO<sub>x</sub>, VOC, and PE emission limitations;
    - iii. all exceedances of the sulfur content limitations in b)(2)e. through b)(2)h.,
    - iv. any deviation from the calcium hydroxide application rates in b)(2)i.
  - 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) 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.
- (3) The permittee shall identify in a semi-annual deviation 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.

The semi-annual reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering August to December) and July 31 (covering January to July), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency). If one of the dates above coincides with the PER submittal, that semi-annual report may be included in the PER submittal.

- (4) 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)
P901	335 or 360 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

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions of any fugitive dust shall be less than or equal to 20% opacity, as a threee-minute average.

Applicable Compliance Method:

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

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

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

c. Emission Limitations:

Sulfur dioxide (SO<sub>2</sub>) emissions while burning natural gas or a mixture of natural gas and coal shall not exceed 0.01 pounds per tons HMA; SO<sub>2</sub> emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.07 pounds per ton of HMA; SO<sub>2</sub> emissions while burning a mixture of on-spec used oil and coal or a mixture of number 2 fuel oil and coal shall not exceed 0.07 pounds per ton HMA; SO<sub>2</sub> emissions while burning number 4 fuel oil shall not exceed 0.11 pounds per ton of HMA; SO<sub>2</sub> emissions while burning a mixture of number 4 fuel oil and coal shall not exceed 0.12 pounds per ton HMA; SO<sub>2</sub> emissions while burning number 6 fuel oil shall not exceed 0.17 pounds per ton of HMA; and SO<sub>2</sub> emissions while burning a mixture of number 6 fuel oil and coal shall not exceed 0.18 pounds per tons of HMA.

Nitrogen oxide (NO<sub>x</sub>) emissions while burning natural gas shall not exceed 0.03 pounds per ton of HMA; NO<sub>x</sub> emissions while burning #2 fuel oil, #4 fuel oil or on-spec used oil shall not exceed 0.06 pounds per ton of HMA; NO<sub>x</sub> emissions while burning #6 fuel oil shall not exceed 0.08 pounds per ton of HMA; NO<sub>x</sub> emissions while burning a mixture of natural gas and coal shall not exceed 0.19 pounds per ton of HMA; NO<sub>x</sub> emissions while burning a mixture of #2 fuel oil and coal or a mixture of on-spec used fuel oil and coal shall not exceed 0.28 pounds per ton of HMA; and NO<sub>x</sub> emissions while burning a mixture of #4 fuel oil and coal or a mixture of #6 fuel oil and coal shall not exceed 0.27 pounds per ton of HMA.

Carbon monoxide (CO) emissions while burning natural gas, #2, #4, #6 and used fuel oil shall not exceed 0.13 pounds per tons of HMA; CO emissions while burning a mixture of natural gas and coal shall not exceed 0.24 pounds per ton of HMA; and CO emissions while burning a mixture of #2 fuel oil and coal, a mixture of #4 fuel oil and coal, a mixture of #6 fuel oil and coal, or on-spec used fuel oil and coal shall not exceed 0.30 pounds per ton of HMA.

Volatile organic compounds (VOCs) while burning natural gas, #2, #4, #6 or on-spec used fuel oil shall not exceed 0.03 pounds per ton of HMA; and VOCs while burning a mixture of natural gas and coal, a mixture of #2 fuel oil and coal, a mixture of #4 fuel oil and coal, a mixture of #6 fuel oil and coal, or on-spec used fuel oil and coal shall not exceed 0.04 pounds per ton HMA.

Particulate emissions (PE) while burning any approved fuel shall not exceed 0.03 gr/dscf.

Applicable Compliance Method:

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

- i. Emissions testing shall be conducted within 120 days after the issuance of this permit or after beginning operation after the issuance of this permit, whichever date is later, and within 6 months prior to permit expiration. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel. Emissions testing shall be necessary for each fuel type switch only once per permitting cycle. For the purposes of this permit, secondary fuels shall be fuels used after the initial emissions test for this permit cycle.
- ii. The emission testing shall be conducted to demonstrate compliance with the emission factors for PE, CO, NO<sub>x</sub>, VOC and SO<sub>2</sub>, for the primary fuel. Testing shall also be conducted to demonstrate compliance with the visible particulate emissions limits for fugitive and stack PE. Prior to secondary fuel use emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.
- iii. Two initial compliance tests shall be conducted. One test shall be conducted while burning natural gas or fuel oil only and the other while burning a fuel oil or natural gas and coal mixture. The emissions test using the coal and fuel mixture shall be conducted to establish the rate of lime application necessary to achieve compliance with the sulfur dioxide emission limits established in this permit.
- iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

PE, Methods 1-5 and 9 of 40 CFR Part 60, Appendix A.

NO<sub>x</sub>, Methods 1-4 and 7 or 7E 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

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

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

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

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

- v. 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, on-spec used oil or a mixture of natural gas or fuel oil and coal for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub> 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.

d. Emission Limitation:

PE emissions shall not exceed 7.29 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 PE 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.

e. Emission Limitation:

VOC emissions shall not exceed 5.93 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 VOC 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. Emission Limitation:

CO emissions shall not exceed 44.9 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 CO 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 term and condition d)(2)), summing the results for all fuels, and dividing by 2,000.

g. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 25.5 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).

h. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 41.3 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 NOx 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.

i. Emission Limitation:

Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 1.51 tons of PM per rolling 12-month period. (AP-42 5th Edition, Table 11.12-2(10/01) and 11.1.2.5 (12/00))

Applicable Compliance Method:

Compliance shall be assumed based upon the following worst case calculations:

Fugitives emissions from the cold end are calculated as follows:

Hopper loading:

300,000 tons of material/year X 0.0051 lb PM/ton of material = 1,530 lbs PM/yr

Aggregate transfer:

(180,000) tons of aggregate/year X 0.0069 lb PM/ton of aggregate = 1,242 lb PM/yr

Sand transfer:

(120,000) tons of sand/year X 0.0021 lb PM/ton of sand = 252 lb PM/yr

The sum of the above is 3,024 lb PM/yr X 1 ton/2,000 lbs = 1.51 tons of PM

j. Emission Limitation:

Asphalt Load out and Silo Filling Emissions

Emissions from load out operations shall not exceed 0.20 ton CO per rolling 12-month period, 0.078 ton PE per rolling 12-month period and 0.6 tons of VOC per rolling 12-month period.

Emissions from silo filling operations shall not exceed 0.18 ton CO per rolling 12-month period, 0.09 ton PE per rolling 12-month period and 1.8 tons VOC per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be assumed based upon the following worst case calculations:



Emissions from asphalt load out and silo filling operations are calculated as follows:

Asphalt plant silo filling and plant load out emissions from AP-42, Table 11.1-14 dated 3/2004

Known:

V = -0.5 Asphalt volatility factor (default)

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

For silo filling, 1.4 per cent of TOC is not VOC (AP-42 Table 11.1-16 dated 3/2004)

For plant load out, 7.3 per cent of TOC is not VOC (AP-42 Table 11.1-16 dated 3/2004)

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	$EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$
Silo filling	VOC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load out	VOC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
Silo filling	CO	$EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$
Load out	CO	$EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

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

Activity	Pollutant	lb/ton	tons/yr (at 300,000 tons/yr production)
Silo filling	PE	$5.86 \times 10^{-4}$	0.09
Load out	PE	$5.22 \times 10^{-4}$	0.078
Silo filling	VOC	$1.20 \times 10^{-2}$	1.8
Load out	VOC	$3.86 \times 10^{-3}$	0.6
Silo filling	CO	$1.18 \times 10^{-3}$	0.18
Load out	CO	$1.35 \times 10^{-3}$	0.20

(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<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) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install and Operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).
- (2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:
  - a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,
  - b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).
- (3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:
  - a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;
  - b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
  - c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".
- (4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:
  - a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;

- b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);
- c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
- d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;
- e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- (5) 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.
- (6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. 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 (LLL) and (JJJ), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. 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 Chapter 3745-77, which may include the requirement to apply for a Title V permit.
- (7) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's 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 permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
- (8) 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  # 2 Fuel Oil  # 4 Fuel Oil  Used Oil  Other(describe)

**Tuning Results:**

Parameter	Recent Stack Test Pollutant Baseline 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: