



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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50 W. Town St., Suite 700  
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P.O. Box 1049  
Columbus, OH 43216-1049

3/1/2010

Robert Boehk  
Erie Materials  
PO Box 2308  
Sandusky, OH 44870

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0322020256  
Permit Number: P0105371  
Permit Type: OAC Chapter 3745-31 Modification  
County: Erie

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate 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 comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Sandusky Register. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.ohio.gov/dapc> in Microsoft Word and Adobe Acrobat format. 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, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402

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 and operate 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 and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

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

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director



**PUBLIC NOTICE      PUBLIC HEARING**  
**OHIO ENVIRONMENTAL PROTECTION AGENCY**  
**ISSUANCE OF A DRAFT PERMIT-TO-INSTALL AND OPERATE (PTIO) TO**  
**Erie Materials**  
**9220 Portland Road**  
**Sandusky, Ohio**

Public notice is hereby given that the Ohio EPA - Division of Air Pollution Control (DAPC) has issued, on March 1, 2010, a draft Permit-to-Install and Operate (PTIO) to Erie Materials (Permit Number: P0105371). The draft PTIO involves permit modifications for a drum mix asphalt plant originally installed in 1995. The permit modifications involve revisions to current emission limitations and a modification to allow the use of slag (a byproduct of foundry operations) as a raw material in the production of asphalt material.

The drum mix asphalt plant addressed by the proposed permit modifications is located at 9220 Portland Road, Sandusky, Ohio.

Copies of the draft PTIO are available for review at Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, (419) 352-8461. The draft permit may also be accessed through Ohio EPA's website at the following link:

<http://www.epa.state.oh.us/dapc/newpermits/airpermits.aspx>

An Ohio EPA information session and public hearing concerning the draft PTIO will be held on April 14, 2010 at the Groton Township Building, 9414 Portland Road, Castalia, Ohio 44824. The information session will begin at 6:30 pm. The public hearing will follow immediately and continue until all persons have had the opportunity to provide testimony related to the proposed permit.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by Ohio EPA at the close of the business day on April 19, 2010. Comments received after this date will not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to: Brian Riedmaier, Division of Air Pollution, Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This permit encompasses the equipment used for a drum-mix asphalt plant of 400 tons per hour maximum rated capacity located in Sandusky, Ohio (Erie County)

3. Facility Emissions and Attainment Status:

The drum-mix asphalt plant was installed in March 1995 under permit to install 03-8713 issued on August 9, 1995. Emissions testing conducted in October 2001 indicated that the facility had potential emissions of carbon monoxide (CO) and volatile organic compounds (VOC) in excess of 250 tons per year and sulfur dioxide emissions in excess of 100 tons per year. In accordance with U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98 the facility has requested a synthetic minor for CO and VOC of less than 100 tons per year. The facility has also requested restrictions on the potential to emit for sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>)\*, and particulate emissions (PE)\*. The drum-mix asphalt plant is located in Erie County which is in attainment for all criteria pollutants.

\*The unrestricted potential to emit for NO<sub>x</sub> and PE is less than 100 tons per year.

4. Source Emissions:

The facility has requested a federally enforceable restriction of 500,000 tons of asphalt production per rolling 12-month period. The annual production restriction will result in potential emissions of 37.50 tons per year CO, 14.50 tons per year SO<sub>2</sub>, 8.25 tons PE per year, and 25.00 tons per year VOC.

5. Conclusion:

This permit will establish federally enforceable limitations and restrictions which will limit the potential to emit for CO and VOC below PSD and Title V applicability. The potential to emit for SO<sub>2</sub> will be restricted below Title V applicability and the potential to emit for NO<sub>x</sub> and PE will be reduced.

6. Please provide additional notes or comments as necessary:

None



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Permit Strategy Write-Up**  
**Permit Number:** P0105371  
**Facility ID:** 0322020256

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

<u>Pollutant</u>	<u>Tons Per Year</u>
(stack emissions)	
PE	8.25
SO2	14.50
CO	37.50
NOx	13.75
OC	25.00
(fugitive emissions)	
PE	3.81
OC	4.10
CO	0.63



**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**DRAFT**

**Air Pollution Permit-to-Install and Operate  
for  
Erie Materials**

Facility ID: 0322020256  
Permit Number: P0105371  
Permit Type: OAC Chapter 3745-31 Modification  
Issued: 3/1/2010  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





**Air Pollution Permit-to-Install and Operate**  
for  
Erie Materials

**Contents**

Authorization ..... 1

A. Standard Terms and Conditions ..... 3

    1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4

    2. Who is responsible for complying with this permit? ..... 4

    3. What records must I keep under this permit? ..... 4

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

    5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4

    6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5

    7. What reports must I submit under this permit? ..... 5

    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? ..... 5

    9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5

    10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 5

    11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6

    12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6

    13. Can I transfer this permit to a new owner or operator? ..... 6

    14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7

    15. What happens if a portion of this permit is determined to be invalid? ..... 7

B. Facility-Wide Terms and Conditions ..... 8

C. Emissions Unit Terms and Conditions ..... 10

    1. P901, 400 TPH Drum Mix Asphalt Plant..... 11





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

## Authorization

Facility ID: 0322020256

Application Number(s): A0038231

Permit Number: P0105371

Permit Description: Permit modifications for a drum mix asphalt plant originally installed in 1995. The permit modifications involve revisions to current emission limitations, a modification to allow the use of slag (a byproduct of foundry operations) as a raw material in the production of asphalt material, and the establishment of synthetic minor restrictions.

Permit Type: OAC Chapter 3745-31 Modification

Permit Fee: \$0.00 *DO NOT send payment at this time - subject to change before final issuance*

Issue Date: 3/1/2010

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:

Erie Materials  
9220 Portland Road  
Sandusky, OH 44870

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, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

## Authorization (continued)

Permit Number: P0105371

Permit Description: Permit modifications for a drum mix asphalt plant originally installed in 1995. The permit modifications involve revisions to current emission limitations, a modification to allow the use of slag (a byproduct of foundry operations) as a raw material in the production of asphalt material, and the establishment of synthetic minor restrictions.

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>P901</b>
Company Equipment ID:	400 TPH Drum Mix Asphalt Plant
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

## **A. Standard Terms and Conditions**



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

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

**2. Who is responsible for complying with this permit?**

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

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

**3. What records must I keep under this permit?**

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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, Northwest 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 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 emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

**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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

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**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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

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## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

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



**1. P901, 400 TPH Drum Mix Asphalt Plant**

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

Drum Mix Asphalt Plant (400 TPH)

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.

b)(1)b., b)(2)a., c)(2), d)(3), d)(4), d)(5), d)(6), e)(1), and f)(1)b through f)(1)f.

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)	<p>Stack Emissions:</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions while burning natural gas shall not exceed 0.001 pound per ton of asphalt produced.</p> <p>SO<sub>2</sub> emissions while burning number 2 fuel oil shall not exceed 0.066 pound per ton of asphalt produced.</p> <p>SO<sub>2</sub> emissions while burning number 4 and on-spec fuel oil shall not exceed 0.11 pound per ton of asphalt produced</p> <p>SO<sub>2</sub> emissions while burning slag in the mix shall not exceed 0.53 pounds per ton of slag used in addition to the emissions generated while burning any permitted fuel.</p> <p>Nitrogen oxides (NO<sub>x</sub>) emissions while</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>burning on-spec used oil and number 2 fuel oil shall not exceed 0.075 pound per ton of asphalt produced.</p> <p>NOx emissions while burning natural gas shall not exceed 0.019 pound per ton of asphalt produced.</p> <p>Carbon monoxide (CO) emissions while burning any approved fuel shall not exceed 0.15 pound per ton of asphalt produced [see b)(2)m.]</p> <p>Organic compounds (OC) emissions, while burning any approved fuel, shall not exceed 0.10 pound per ton of asphalt produced [see b)(2)n.]</p> <p>Particulate emissions (PE), while burning any approved fuel, shall not exceed 0.033 pound per ton of asphalt produced.</p> <p>See b)(2)b. through b)(2)e. and b)(2)k. through b)(2)q.</p>
b.	OAC rule 3745-31-05(D)	<p>Stack Emissions:</p> <p>PE shall not exceed 8.25 tons per rolling, 12-month period.</p> <p>SO2 emissions shall not exceed 14.50 tons per rolling, 12-month period.</p> <p>NOx emissions shall not exceed 13.75 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 37.50 tons per rolling, 12-month period.</p> <p>OC emissions shall not exceed 25.00 tons per rolling, 12-month period.</p> <p>Asphalt Load Out Emissions:</p> <p>Emissions from load out operations shall not exceed 0.33 ton CO per rolling, 12-month period, 0.13 ton PE per rolling, 12-month period, and 1.05 tons of OC per rolling, 12-month period.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Asphalt Silo Filling Emissions:</p> <p>Emissions from silo filling operations shall not exceed 0.30 ton CO per rolling 12-month period, 0.15 ton PE per rolling 12-month period, and 3.05 tons OC per rolling 12-month period.</p> <p>Cold End Fugitive Dust Emissions:</p> <p>Emissions of fugitive dust associated with the cold aggregate, sand, and RAP loading, and cold aggregate, sand, and RAP transfer operations shall not exceed 3.53 tons of PE per rolling, 12-month period.</p> <p>See b)(2)a.</p>
c.	40 CFR Part 60, Subpart I	<p>Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.</p> <p>See b)(2)l.</p>
d.	<p>OAC rule 3745-17-07(A)(1)</p> <p>OAC rule 3745-17-11(B)(1)</p> <p>OAC rule 3745-17-07(B)(1)</p> <p>OAC rule 3745-17-08(A)(1)</p> <p>OAC rule 3745-18-06(E)</p>	<p>See b)(2)g.</p> <p>See b)(2)f.</p> <p>See b)(2)h.</p> <p>See b)(2)i.</p> <p>See b)(2)f.</p>

(2) Additional Terms and Conditions

- a. The emission limitations per rolling, 12-month period contained in b)(1)b are based on production restrictions [see c)(2)] for the purpose of establishing federally enforceable limitations to avoid Prevention of Significant Deterioration (PSD) and Title V applicability. For purposes of federal enforceability, a limitation on OC emissions effectively restricts volatile organic compound (VOC) emissions.
- b. 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.
- c. 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.
- d. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.



- e. Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10 percent opacity, as a 3-minute average.
- f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)(a).
- g. The emission limitation specified by this rule is less stringent than the opacity limitation established pursuant to 40 CFR Part 60, Subpart I.
- h. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B) (11) (e).
- i. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08.
- j. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and the opacity requirements of 40 CFR Part 60, Subpart I.
- k. The particulate matter emissions limitation of 0.04 gr/dscf specified by this rule is less stringent than the 0.033 pound PE per ton as asphalt produced limitation established pursuant to OAC rule 3745-31-05(A)(3)(a).
- l. The best available technology (BAT) determination was made in accordance with U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98. Emissions unit P901 was installed in 3-95 under PTI #03-8713 with potential emissions below applicable major source thresholds. Revised emission calculations indicate that potential CO emissions exceeded the major source threshold. Actual source emissions never exceeded major source thresholds, thus requiring the application of best available control technology (BACT) equivalent control which has been determined to be 0.15 pounds of carbon monoxide per ton of asphalt produced.
- m. The best available technology (BAT) determination was made in accordance with U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98. Emissions unit P901 was installed in 3-95 under PTI #03-8713 with potential emissions below applicable major source thresholds. Revised emission calculations indicate that potential OC emissions exceeded the major source threshold. Actual source emissions never exceeded major source thresholds, thus requiring the application of best available control technology (BACT) equivalent control which has been determined to be 0.10 pounds of organic compounds per ton of asphalt produced.
- n. 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.



- o. All number 4 oil burned in the emissions unit shall have a sulfur content equal to or less than 0.8 percent, by weight.
- p. Each shipment of oil burned in this emissions unit shall be “on-specification” (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:

Property/Contaminant Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	less than 1,000 ppm; or less than 4,000 ppm if the presumption that the used oil contains hazardous waste is rebutted, as described below
flash point	100°F, minimum

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

PCB's	less than 2 ppm
heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated, pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.\*

If analytical results demonstrate that used oil containing 1,000 ppm or more total halogens, but less than 4,000 total halogens, does not contain greater than 100 ppm of any individual halogenated hazardous constituent found in the F001 and



F002 listings in OAC rule 3745-51-31 and there is no information suggesting that any other halogenated hazardous constituent (e.g., chlorinated pesticides) has come in contact with the oil, then the presumption that the oil contains hazardous waste has been successfully rebutted.\*\* The rebuttable presumption does not apply to either metal working oils/fluids containing chlorinated paraffins, if processed through a tolling arrangement as described in OAC rule 3745-279-24(C), or used oils contaminated with chlorofluorocarbons removed from refrigeration units.

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

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

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

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 is subject to OAC rules 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 500,000 tons per rolling 12-month period.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels specified in the following table:

Months	Maximum Allowable Cumulative Tons of Hot Mix Asphalt Produced
1	100,000
1-2	200,000
1-3	300,000
1-4	400,000



1-12	500,000
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After the first 12 calendar months of operation, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the asphalt production; and

- b. The amount of asphalt produced and the SO<sub>2</sub> emissions are restricted by the following equation:

$$45.5 \text{ tons per 12-month period} \geq ((0.001)*(a) + (0.066)*(b) + (0.11)*(c) + (0.53)(d))/2000$$

Where:

a = tons asphalt produced with natural gas per rolling, 12-month period;

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

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

d = tons of slag employed in the aggregate mix per rolling, 12-month period.

\* = factors may be revised based upon Ohio EPA validated emissions testing and shall be revised if emissions testing results higher emissions

- (3) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for CO and NO<sub>x</sub>. The permittee shall submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER.
- (4) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles\* in amounts not to exceed 75 percent of each asphalt mix produced. The permittee may not substitute other raw materials not specifically identified in the PTIO application submitted on January 7, 2009 without prior approval from Ohio EPA.

The permittee may substitute slag produced from blast, basic oxygen, and open hearth furnaces into the asphalt mix, as described in OAC rule 3745-51-04(B)(7). Slag produced from other sources must be evaluated in accordance with OAC rule 3745-52-11. If determined to be hazardous waste, the slag must be managed in accordance with applicable regulations in OAC chapter 3745-266, recyclable materials used in a manner constituting disposal.

\*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 manufacturer 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.

- (5) The permittee shall only burn natural gas, number 2 fuel oil, number 4 fuel oil, and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per paragraph f)(1).
  - (6) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation. The discharge of the baghouse (i.e., the baghouse stack) shall be a minimum of 50 feet above the ground, prior to commencing use of slag.
  - (7) The sulfur content in the slag used in the aggregate mix shall not exceed 1.75% sulfur, by weight. The permittee may use slag with a higher sulfur content than 1.75% if prior approval is granted by Ohio EPA and stack testing is performed to demonstrate the sulfur dioxide emission limits in b)(1) are not exceeded.
  - (8) The amount of slag employed in the mix shall not exceed, at anytime 1,500 tons per day.
  - (9) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
  - (10) The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation (except for an initial operating period after filter media replacement to attain design filtering efficiency).
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall document all times the baghouse and/or associated control equipment serving this emissions unit were/was not employed when the emissions unit was in operation.
  - (2) 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.

- (3) The permittee shall maintain daily records of the following information:
  - a. the type of slag used, i.e. size classification;
  - b. amount of slag used, in tons; and
  - c. the maximum amount, in percent, of RAP and/or shingles used in any mix.
- (4) The permittee shall maintain monthly records of the following information for emissions unit P901:
  - a. the total asphalt produced for each fuel type, in tons, for each month;
  - b. during the first 12 calendar months of operation, the permittee shall record the cumulative asphalt production and the asphalt production by fuel type;
  - c. beginning after the first 12 calendar months of issuance of this permit, the rolling, 12-month summation of the asphalt production and the asphalt production by fuel type; and
  - d. beginning after the first 12 calendar months of issuance of this permit, the rolling, 12-month summation, in tons, of the PE, SO<sub>2</sub>\*, NO<sub>x</sub>, OC, and CO emissions.

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

- (5) For each shipment of number 2 fuel oil, number 4 fuel oil, and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
- (6) The permittee shall submit and receive approval from Ohio EPA for a slag sampling and testing plan prior to applying slag in the asphalt mix. In the slag sampling plan, the



permittee shall commit to demonstrating that the sulfur content of the slag does not exceed 1.75%.

- (7) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack servicing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall note the following in the operation log:
  - a. the color of the visible emissions;
  - b. the cause of the visible particulate emissions;
  - c. the total duration of the visible emission incident; and
  - d. corrective actions taken to correct the excess visible particulate emissions.
- (8) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust. If visible emissions are observed, the permittee shall note the following in the operation log:
  - a. the location and color of the visible emissions;
  - b. the cause of the visible particulate emissions;
  - c. the total duration of any visible emissions incident; and
  - d. any corrective actions taken to minimize or eliminate the visible emissions.
- (9) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(2)). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency. The permittee shall submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER.
- (10) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

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 slag restrictions: 1.75% sulfur content and 1,500 tons per day, as listed in c)(7) and c)(8).
  - iii. all exceedances of the rolling 12-month total PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emission limitations; and
  - iv. all exceedances of the sulfur content limitations: 0.5%, 0.8%, and on-spec used oil specifications, as listed in b)(2)o. through b)(2)q.
- b. 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 a 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 the annual permit evaluation report the following information:
  - a. concerning the quality of used oil burned in this emissions unit:
    - i. any exceedance of the used oil standards in OAC rule 3745-279-11;
    - ii. any occasion where oil containing 1,000 ppm or more total halogens was burned prior to submitting an acceptable (approved by the Division or Hazardous Waste Management) rebuttal to the presumption that the oil contains or has been mixed with hazardous waste;
    - iii. any exceedance of the limitations for mercury and/or PCBs;
    - iv. any deviation from the minimum heat content of 135,000 Btu/gallon.



- b. concerning visible particulate emissions:
    - i. identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit; and
    - ii. describe any corrective actions take to minimize or eliminate the abnormal visible particulate emissions.
- (4) Where the analytical results for any shipment of used oil burned in this emissions unit establish that the used oil contains total halogens greater than 1,000 ppm, but less than 4,000 ppm, the results of the analysis for total halogens (from the appropriate test Method 9075, 9076, or 9077) and the information obtained to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste shall be submitted to the appropriate District Office or local air agency. Each rebuttal demonstration shall include:
- a. the date the used oil was received;
  - b. the facility location or identification number where the oil was or will be burned;
  - c. the amount of oil in the shipment; and
  - d. all information, including all the analytical results, relied upon by the permittee to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste.

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

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitations:

NO<sub>x</sub> emissions, while burning natural gas, shall not exceed 0.019 pound per ton of asphalt produced; NO<sub>x</sub> emissions, while burning on-spec used oil, number 2 fuel oil or number 4 fuel oil, shall not exceed 0.075 pound per ton of asphalt produced; SO<sub>2</sub> emissions, while burning natural gas, shall not exceed 0.001 pound per ton of asphalt produced; SO<sub>2</sub> emissions, while burning number 2 fuel oil, shall not exceed 0.066 pound per ton of asphalt produced; SO<sub>2</sub> emissions, while burning on-spec used oil or number 4 fuel oil, shall not exceed 0.11 pound per ton of asphalt produced; SO<sub>2</sub> emissions while employing slag in the mix shall not exceed 0.53 pounds per ton of slag used in addition to the emissions generated while burning any permitted fuel; CO emissions, while burning any approved fuel, shall not exceed 0.15 pound per ton of asphalt produced; OC emissions, while burning any approved fuel, shall not exceed 0.10 pound per ton of asphalt produced; and PE, while burning any approved fuel, shall not exceed 0.033 pound per ton of asphalt produced..



Applicable Compliance Method:

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

- i. Emission 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, unless otherwise specified or approved by the Ohio EPA District Office or local air agency. 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 used 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. Future emission testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e. Engineering Guide #16, OAC rule 3745-15-04, etc.). Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA District Office or local air agency.
- iii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, OC, CO, NOx and SO2 for the primary fuel. 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.
- iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:
  - PE, Methods 1-5 of 40 CFR Part 60, Appendix A.
  - NOx, 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
  - OC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

The OC pounds per hour emission rate observed during the emissions test shall be calculated in accordance with OAC paragraph 3745-21-10(C)(7). In lieu of this the permittee shall convert the mass emission value from OC as carbon to OC using the molecular weight of propane, i.e., the OC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the OC emission rate observed during testing (in lbs./hr) by 44 (propane) and dividing by 36 (3 atoms of carbon).
- v. The test(s) shall be conducted while this emissions unit is operating at its maximum capacity for PE, OC, CO, NOx and SO2\* and employing RAP



to verify OC emissions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

\*Emission testing for SO2 will not be required when burning natural gas.

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

Personnel from the 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 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 Ohio EPA District Office or local air agency.

b. Emissions Limitation:

PE emissions shall not exceed 8.25 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the pound per ton of asphalt produced PE limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced PE limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

c. Emission Limitation:

OC emissions shall not exceed 25.00 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the pound per ton of asphalt produced OC emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced OC emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.



d. Emission Limitation:

CO emissions shall not exceed 37.50 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the pound per ton of asphalt produced CO emission limitation by the rolling, 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced CO emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

e. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 47.24 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)(3).

f. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 13.75 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the “worst-case” pound per ton of asphalt produced NO<sub>x</sub> emission limitation by the rolling 12 month asphalt production restriction and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced NO<sub>x</sub> emission limitation and the rolling, 12 month asphalt production restriction, compliance with the annual emission limitation shall be assumed.

g. Emission Limitation:

Emissions from the baghouse stack shall not exhibit 20% opacity, or greater.

Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined according to USEPA Method 9 of 40 CFR Part 60, Appendix A.

h. Emission Limitation:

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



Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60, Standards of Performance for New Stationary Sources, as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

j. Emission Limitation:

Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10 percent opacity, as a 3-minute average.

Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

k. Emissions Limitation:

Emissions of fugitive dust associated with the cold aggregate, sand, and RAP loading, and cold aggregate, sand, and RAP transfer operations shall not exceed 3.53 tons of PE per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be assumed based upon the following worst-case calculations using emission factors from AP-42 5th Edition, Table 11.12-2 (10/01) and 11.1.2.5 (12/00):

Fugitive emissions from the cold end are calculated as follows

Weigh hopper loading:

$$500,000 \text{ tons of material/year} \times 0.0051 \text{ lb PE/ton of material} = 2,550 \text{ lbs PE/yr}$$

Aggregate transfer:

$$500,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PE/ton of aggregate} = 3,450 \text{ lbs PE/yr}$$

Sand transfer:

$$500,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PE/ton of sand} = 1,050 \text{ lbs PE/yr}$$



The sum of the above is 7050 lbs PE/yr X 1 ton/2000 pounds = 3.53 tons PE

I. Emissions Limitation:

Asphalt Load Out and Silo Filling Emissions:

- i. Emissions from asphalt load out operations shall not exceed 0.33 ton CO per rolling, 12-month period, 0.13 ton PE per rolling, 12-month period, and 1.05 tons of OC per rolling, 12-month period;
- ii. Emissions from asphalt silo filling operations shall not exceed 0.30 ton CO per rolling, 12-month period, 0.15 ton PE per rolling, 12-month period, and 3.05 tons OC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual emission limitations shall be assumed based upon the following worst-case calculations using emission factors from AP-42 5th Edition, Table 11.1-14 (3/2004) and the asphalt production restriction:

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, 3/2004)

For plant load out, 7.3 per cent of TOC is not VOC (AP-42 Table 11.1-16, 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	OC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load out	OC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
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 500,000 tons/yr production)
Silo filling	PE	$5.86 \times 10^{-4}$	0.15



Load out	PE	$5.22 \times 10^{-4}$	0.13
Silo filling	OC	$1.22 \times 10^{-2}$	3.05
Load out	OC	$4.14 \times 10^{-3}$	1.04
Silo filling	CO	$1.18 \times 10^{-3}$	0.30
Load out	CO	$1.35 \times 10^{-3}$	0.34

(2) Used Oil Analyses

The metal contents for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a “Total Analysis” or “Total Metals” testing methodology. The metal contents shall not be analyzed using a leachate procedure such as the “Toxicity Characteristic Leaching Procedure” or “Extraction Procedure Toxicity Test”. Chapter 2 of “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (SW-846) shall be used for selecting the appropriate test methods for the used oil analyses.

(3) Burner Tuning

a. Introduction

The permittee shall submit for approval from Ohio EPA a “burner tuning procedure” for this facility by April 1, of each year. The burner tuning procedure shall contain the basic elements as described in the language below with the ability for the permittee to adjust the frequency of the burner tuning procedure depending upon the production of the plant. The submittal of the “burner tuning procedure” is independent of the PER submittal. If approval is not granted then the permittee shall submit another burner tuning procedure within 30 days of receiving a written disapproval. In the event no burner tuning procedure is submitted and approved within the specified timelines then the following shall be adhered to:

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 manufacturer's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(2)) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in f)(2)e. The general procedure for tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for 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 percent 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 percent 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 percent of the pollutant baseline values.

- v. Once all of the measured stack exhaust gas values are within the 115 percent 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.

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.

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.

(4) Miscellaneous Requirements

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

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
P901	400 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.

NSPS contains a requirement to report the items below. These reporting requirements were fulfilled under the initial permit to install (03-8713) issued on August 9, 1995.

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install and Operate**

**Permit Number:** P0105371

**Facility ID:** 0322020256

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

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





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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 (i.e.: 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 manufacturer's 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: