

Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Kokosing Materials Inc Plant 509 (KMI 509) is a 500 TPH continuous hot mix asphalt plant located in Columbus, Ohio. This permit renewal includes an administrative modification to the VOC emissions limitations to reflect the results of facility's most recent compliance test.

3. Facility Emissions and Attainment Status:

KMI 509 operates under federally enforceable limitations to avoid classification as a major source under Title V and New Source Review. The facility is limited to an annual production rate of 1,000,000 tons of asphalt per rolling, 12-month period. Franklin County is currently in marginal nonattainment for the 2008 eight-hour ozone standard.

4. Source Emissions:

The 500 TPH continuous hot mix asphalt plant (emissions unit P901) is the source of PE, PM₁₀, NO_x, CO, SO₂, VOC and toxic air contaminant emissions from the manufacturing of hot mix asphalt. P901 consists of the 350 TPH counterflow double drum as well as material handling operations, silo filling and drum mix load-out operations. P901 is permitted to burn No. 2 fuel oil, on-spec used oil and natural gas. The raw material mix may contain up to 50% RAP or shingles. Particulate emissions from the 500 TPH asphalt drum are controlled by a baghouse.

KMI 509 is also a source of PE and PM₁₀ emissions from the plant roadways and parking areas (emissions unit F001) as well as the gravel, sand, limestone and RAP/shingles storage piles (emissions unit F002).

Following several failed VOC emissions compliance tests, on April 2, 2015, KMI 509 submitted documentation to justify increasing their VOC limit due to the variability of the VOC content in their raw materials (see Compliance Report ID 91806). Based on the information provided, CDO concluded that it would be appropriate to increase the allowable VOC emissions rate due to the variable VOC content in the raw material used at KMI 509.

On July 9 and 10, 2015, KMI 509 conducted compliance testing on P901 while burning natural gas and employing RAP. The average VOC emissions were reported as 35.568 pounds per hour. The hourly VOC emissions limitation established as BAT for P901 is being modified to reflect the results of the compliance test. The modified hourly VOC limitation includes a 15% safety factor as calculated below.

$(35.568 \text{ lb/hr}) \times 1.15 = 40.9 \text{ pounds of VOC per hour}$

The VOC emissions limitation established under OAC rule 3745-31-05(D) is also being modified to reflect the results of the compliance test. The modified VOC emissions limitation established under OAC rule 3745-31-05(D) includes annual stack emissions calculated as follows.

$(1,000,000 \text{ tons of asphalt/yr}) \times (EF_{\text{stack test}}) / (2,000 \text{ lb/ton}) = 63.5 \text{ tons of VOC per year, where:}$

$EF_{\text{stack test}} = \text{VOC emissions factor calculated from stack test results} = (40.9 \text{ lb of VOC/hr}) / (321.2 \text{ TPH})$
 $= 0.127 \text{ lb of VOC per ton of asphalt}$

5. Conclusion:

The issuance of P0119222 is recommended. The emission limitations, operational restrictions, monitoring, recordkeeping and testing requirements contained in this FEPTIO are adequate to ensure that the applicable PE, PM₁₀, NO_x, CO, SO₂ and VOC thresholds will not be exceeded.

6. Please provide additional notes or comments as necessary:

None

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

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	98.4
NO _x	20.0
SO ₂	52.3
VOC	71.4
PE	34.6
PM ₁₀	20.6

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install and Operate Administrative Modification

Kokosing Materials Inc Plant 509

4755 S HIGH ST,, COLUMBUS, OH 43207

ID#:P0119222

Date of Action: 3/1/2016

Permit Desc:FEPTIO Renewal permit for 500 TPH hot mix asphalt plant, roadways, parking areas, and storage piles including an administrative modification to adjust the VOC limit to reflect the most recent compliance test.

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



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Kokosing Materials Inc Plant 509**

Facility ID:	0125042093
Permit Number:	P0119222
Permit Type:	Administrative Modification
Issued:	3/1/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
Kokosing Materials Inc Plant 509

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Draft Permit-to-Install and Operate

Kokosing Materials Inc Plant 509

Permit Number: P0119222

Facility ID: 0125042093

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0125042093
Application Number(s): A0053858
Permit Number: P0119222
Permit Description: FEPTIO Renewal permit for 500 TPH hot mix asphalt plant, roadways, parking areas, and storage piles including an administrative modification to adjust the VOC limit to reflect the most recent compliance test
Permit Type: Administrative Modification
Permit Fee: \$625.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 3/1/2016
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Kokosing Materials Inc Plant 509
4755 S HIGH ST
COLUMBUS, OH 43207

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

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

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

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Draft Permit-to-Install and Operate

Kokosing Materials Inc Plant 509

Permit Number: P0119222

Facility ID: 0125042093

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0119222

Permit Description: FEPTIO Renewal permit for 500 TPH hot mix asphalt plant, roadways, parking areas, and storage piles including an administrative modification to adjust the VOC limit to reflect the most recent compliance test

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

Emissions Unit ID:	F001
Company Equipment ID:	Plant Roadways
Superseded Permit Number:	P0083151
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Storage Piles
Superseded Permit Number:	P0083151
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Plant 509
Superseded Permit Number:	P0105646
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
Kokosing Materials Inc Plant 509
Permit Number: P0119222
Facility ID: 0125042093
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 of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by 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.

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

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

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

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



Draft Permit-to-Install and Operate
Kokosing Materials Inc Plant 509
Permit Number: P0119222
Facility ID: 0125042093
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B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

Kokosing Materials Inc Plant 509

Permit Number: P0119222

Facility ID: 0125042093

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.
2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart I: P901. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA, Central District Office.



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C. Emissions Unit Terms and Conditions



1. F001, Plant Roadways

Operations, Property and/or Equipment Description:

Paved and unpaved roadways and parking areas

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	No visible PE from any paved roadway except for six minutes during any 60-minute period. No visible PE from any unpaved roadway except for thirteen minutes during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a. through b)(2)e. below.
b.	OAC rule 3745-17-07(B)(4)	No visible PE from any paved roadway or parking area except for a period of time not to exceed 6 minutes during any 60-minute observation period.
c.	OAC rule 3745-17-07(B)(5)	No visible PE from any unpaved roadway or parking area except for a period of time not to exceed 13 minutes during any 60-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		minute observation period.
d.	OAC rule 3745-17-08(B)	<p>The permittee shall employ reasonably available control measures to minimize or eliminate visible PE.</p> <p>See b)(2)a., b)(2)b., b)(2)d. and b)(2)e. below.</p>

(2) Additional Terms and Conditions

- a. The permittee shall employ reasonable available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The permittee shall employ reasonable available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.



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c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>roadways and parking areas</u>	<u>minimum inspection frequency</u>
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all paved roadways and parking areas	daily
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all unpaved roadways and parking areas	daily
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- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area 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. 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.

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

- a. 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;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures; and
- c. the dates the control measures were implemented.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is

considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

No visible PE from any paved roadway except for six minutes during any 60-minute period.

No visible PE from any unpaved roadway except for thirteen minutes during any 60-minute period.

No visible PE from any paved roadway or parking area except for a period of time not to exceed 6 minutes during any 60-minute observation period.

No visible PE from any unpaved roadway or parking area except for a period of time not to exceed 13 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed above 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, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) **Miscellaneous Requirements**

- (1) None.

2. F002, Storage Piles

Operations, Property and/or Equipment Description:

Gravel, sand, limestone and RAP/shingles storage piles

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	There shall be no visible PE except for a period of time not to exceed thirteen minutes during any 60-minute observation period. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a. through b)(2)d. below.
b.	OAC rule 3745-17-07(B)	There shall be no visible PE except for a period of time not to exceed thirteen minutes during any 60-minute observation period.
c.	OAC rule 3745-17-08(B)	Utilize reasonably available control measures to prevent fugitive dust from becoming airborne.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. through b)(2)d. below.

(2) Additional Terms and Conditions

- a. The permittee shall employ reasonable available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. 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.
- c. The permittee shall employ reasonable 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 accordance with the application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, 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
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- (2) Except as otherwise provided in this section, 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>
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all	daily
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- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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all	daily
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- (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:

- a. 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;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures; and
- c. the dates the control measures were implemented.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:

There shall be no visible PE except for a period of time not to exceed thirteen minutes in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible emission limitation listed above 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)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

- (1) None.



3. P901, Plant 509

Operations, Property and/or Equipment Description:

500 TPH Continuous Counterflow Hot Mix Asphalt Plant (natural gas, No. 2 fuel oil, on-spec used oil)

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. See d)(15), d)(16), d)(17) and e)(4) below.

(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. See b)(1)g., b)(2)e., d)(6), e)(2) and f)(1)h. through f)(1)n. below.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to 40 CFR Part 60, Subpart I.
b.	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a. below.
d.	OAC rule 3745-17-11(B)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart I.
e.	OAC rule 3745-18-06(E)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-31-05(A)(3)	<p>Carbon monoxide (CO) emissions shall not exceed 98.4 pounds per hour when burning on-spec used oil or No. 2 fuel oil.</p> <p>CO emissions shall not exceed 60.0 pounds per hour when burning natural gas.</p> <p>Nitrogen oxide (NO_x) emissions shall not exceed 14.9 pounds per hour when burning on-spec used oil or No. 2 fuel oil.</p> <p>NO_x emissions shall not exceed 20.0 pounds per hour when burning natural gas.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 52.9 pounds per hour when burning on-spec used oil or No. 2 fuel oil.</p> <p>SO₂ emissions shall not exceed 35.5 pounds per hour when burning natural gas.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 40.9 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.</p> <p>PM-10 emissions from the stack shall not exceed 0.04 gr/dscf when burning on-spec used oil, No. 2 fuel oil, or natural gas.</p> <p>Fugitive particulate emissions shall not exceed 5.20 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.</p> <p>Fugitive PM-10 emissions shall not exceed 3.01 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.</p> <p>Arsenic, cadmium, chromium, and lead</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emissions are limited by the fuel specifications in b)(2)b. below.</p> <p>Visible particulate emissions from the stack shall not exceed 20% opacity, as a 3-minute average.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)c. below.</p> <p>No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper.</p> <p>Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper) shall not exceed 10% opacity, as a 3-minute average.</p> <p>The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.</p> <p>The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60, Subpart I.</p> <p>See b)(2)d. below.</p>
g.	OAC rule 3745-31-05(D) [Federally Enforceable Limitations]	<p>Particulate emissions (PE) from the stack shall not exceed 12.2 tons per rolling, 12-month period.</p> <p>PM-10 emissions from the stack shall not</p>



Draft Permit-to-Install and Operate

Kokosing Materials Inc Plant 509

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 12.2 tons per rolling, 12-month period.</p> <p>Fugitive PE shall not exceed 5.20 tons per rolling, 12-month period.</p> <p>Fugitive PM-10 emissions shall not exceed 3.01 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 98.4 tons per rolling, 12-month period.</p> <p>NO_x emissions shall not exceed 20.0 tons per rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 52.3 tons per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 71.4 tons per rolling, 12-month period.</p> <p>See b)(2)e. below.</p>
h.	<p>NSPS 40 CFR Part 60, Subpart I [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.]</p>	<p>No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which contain PE in excess of 0.04 gr/dscf or exhibit 20 percent opacity, or greater.</p>

(2) Additional Terms and Conditions

a. Appendix A, Area Fugitive Dust Control Measures

- i. The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible particulate emissions of fugitive dust from the aggregate storage bins.



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- ii. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible particulate emissions of fugitive dust from conveyors and all transfer points to the dryer.

- iii. Installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control fugitive dust. Such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust.

- b. 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 4,000 ppm maximum if the presumption that the used oil contains hazardous waste is rebutted, as described below
Lead	100 ppm, maximum
Flash point	100°F, minimum

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 shall also not exceed the following mercury limitation nor fall below the following heating value:

Heat content	135,000 Btu/gallon, minimum
PCBs	2 ppm, maximum
Mercury	1 ppm, maximum

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated, pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated

constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.*

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

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

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

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

- c. The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible fugitive emissions from the rotary drum.
- d. All fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5%.
- e. The maximum annual asphalt production rate for this emissions unit shall not exceed 1,000,000 tons per rolling, 12-month period.

c) Operational Restrictions

- (1) Raw Material and Fuel Use Restrictions

- a. The permittee shall burn only No. 2 fuel oil, on-spec used oil, or natural gas in this emissions unit.

When a scheduled/planned fuel switch occurs, the permittee shall complete the emission testing required for that fuel in accordance with f)(1)a. and shall perform burner tuning in accordance with f)(2)e.

In the event that the primary fuel supply is unexpectedly interrupted and an unscheduled/unplanned fuel switch is necessary, the permittee shall notify Ohio EPA, Central District Office within three business days after the fuel switch occurs.

- b. 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.
- c. The permittee may substitute reclaimed asphalt pavement (RAP) or shingles in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.
- d. The permittee may substitute asphalt shingles. 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.

- (2) No. 2 fuel oil burned in this emissions unit shall meet U.S. EPA's specifications for Ultra Low Sulfur Diesel (ULSD) found in 40 CFR 80.510(c).
- (3) The exit of the stack serving this emissions unit shall be a minimum of 50 feet above ground.
- (4) The permittee shall restrict the hourly production level (averaged daily) for this emissions unit to 115% or less of the average hourly production level achieved during the most recent stack test that demonstrated compliance with the applicable emissions limitations. [During the most recent stack tests that demonstrated compliance with the applicable emissions limitations, the average hourly production level achieved was 321 tons per hour (July 9 and 10, 2015).]

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.

- (2) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a daily basis.
- (3) The permittee shall maintain documents provided by the oil supplier for each shipment of No. 2 fuel oil to demonstrate compliance with the ULSD requirement. These documents must include the receipt or bill of lading that includes confirmation that the fuel meets the No. 2 diesel fuel ULSD standard.
- (4) For each shipment of 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 permittee's or oil supplier's analyses for sulfur content and heat content.
- (5) **Used Oil Analysis Records**

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 Materials and Waste Management and/or the Division of Air Pollution Control (the Ohio EPA, Central District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses through an independent laboratory.

*Permittee may use their own used oil recordkeeping form upon approval from Ohio EPA.

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

- (6) The permittee shall maintain monthly records of the following information:
 - a. the asphalt production, in tons, for each month;
 - b. the asphalt production, in tons, for each fuel type for each month;
 - c. the maximum percentage of RAP and shingles used in each mix;
 - d. the rolling, 12-month summations of PE (stack), PM-10 (stack), CO, NO_x, SO₂ and VOC emissions, in tons; and
 - e. the rolling, 12-month summation of the total asphalt production, in tons.
- (7) For each day during which the permittee burns a fuel other than natural gas, No. 2 fuel oil, and/or on-spec used oil, the permittee shall maintain a record of the type, percent sulfur content, and quantity of fuel burned in this emissions unit.
- (8) For each day during which the permittee uses any raw material that is not specifically identified in the associated permit application(s) without prior approval from Ohio EPA, the permittee shall maintain a record of the type and quantity of raw material employed in this emissions unit.
- (9) The permittee shall maintain documentation verifying that any shingles employed do not contain asbestos as described in c)(1)d.
- (10) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the enclosures for the hot aggregate elevator, vibrating screens and weigh hopper servicing this emissions unit. If visible particulate emissions are observed, the permittee shall note the following in the operation log:
 - a. the color of the visible particulate emissions;
 - b. the cause of the visible particulate emissions;
 - c. the total duration of the visible particulate emission incident; and

- d. corrective actions taken to eliminate the visible particulate emissions.

The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned visible particulate emissions check frequency if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the visible particulate emissions requirements.

- (11) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from the stack, aggregate storage bins and cold aggregate elevator/conveyor serving this emissions unit. If abnormal visible emissions are observed, the permittee shall note the following in the operation log:
 - a. the color of the abnormal visible particulate emissions;
 - b. the cause of the abnormal visible particulate emissions;
 - c. the total duration of any abnormal visible particulate emissions incident; and
 - d. any corrective actions taken to eliminate the abnormal visible particulate emissions.

The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office modify the above-mentioned visible particulate emissions check frequency if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the visible particulate emissions requirements.

- (12) While performing each burner evaluation/tuning, the permittee shall record the results of the burner evaluation/tuning using the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form (as found in g)(1)). An alternative form may be used upon approval of the Ohio EPA, Central District Office.
- (13) The permittee shall maintain daily records of the following information:
 - a. the amount, in tons, of asphalt produced;
 - b. the operating hours of the emissions unit; and
 - c. the average operating rate, in tons per hour.
- (14) The permit application for this emissions unit, P901, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio

EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8 hour work day and a 40 hour work week, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “X” is 24 hours per day and “Y” is 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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

Toxic Contaminant: formaldehyde

TLV (mg/m³): 0.368

Maximum Hourly Emission Rate (lb/hr): 1.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 2.20

MAGLC (ug/m³): 8.76

The permittee, has demonstrated that emissions of formaldehyde, from emissions unit(s) P901, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC).

- (15) Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

- (16) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F),

initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

- (17) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Central District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

(2) Quarterly Deviation (Excursion) Reports

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 of any regulated air pollutant and have been detected by the monitoring, recordkeeping 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 PE (stack), PE (fugitive), PM-10 (stack), PM-10 (fugitive), CO, NO_x, SO₂ and VOC emissions limitations;
 - iii. all periods of time when the emissions unit burned a fuel other than No. 2 fuel oil, on-spec used oil, or natural gas;

- 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 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 Central District Office).

(3) Annual Permit Evaluation Report (PER)

The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

In addition to the reporting the information as required by the PER instructions, the permittee shall provide the following additional information in the PER:

- a. for 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 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;
 - 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. all periods of time when the pressure drop across the fabric filter was outside the acceptable range;
- c. all exceedances of the RAP and shingles raw material mix limitations;
- d. all Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants forms produced during the past calendar year;
- e. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

- f. all days during which any visible fugitive particulate emissions were observed from the enclosures for the hot aggregate elevator, vibrating screens, weigh hopper, aggregate storage bins and cold aggregate elevator associated with this emissions unit; and
- g. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there is no exceedance(s), day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no exceedance(s), day(s) and/or corrective action(s) happen and/or were taken.

- (4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (5) The permittee shall notify Ohio EPA, Central District Office, of any record demonstrating that the hot mix asphalt plant's hourly production level (averaged daily) exceeded 115% of the average hourly production level achieved during the most recent stack test that demonstrated compliance with the applicable emissions limitations. The notification shall be made within three business days after the exceedance occurs.
- (6) The permittee shall notify Ohio EPA, Central District Office, of any unscheduled/unplanned fuel switch due to the unexpected interruption of the primary fuel supply. The notification shall be made within three business days after the fuel switch occurs.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations:
 - CO emissions shall not exceed 98.4 pounds per hour when burning on-spec used oil or No. 2 fuel oil.
 - CO emissions shall not exceed 60.0 pounds per hour when burning natural gas.
 - NO_x emissions shall not exceed 14.9 pounds per hour when burning on-spec used oil or No. 2 fuel oil.
 - NO_x emissions shall not exceed 20.0 pounds per hour when burning natural gas.



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SO₂ emissions shall not exceed 52.9 pounds per hour when burning on-spec used oil or No. 2 fuel oil.

SO₂ emissions shall not exceed 35.5 pounds per hour when burning natural gas.

VOC emissions shall not exceed 40.9 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.

PM-10 emissions from the stack shall not exceed 0.04 gr/dscf when burning on-spec used oil, No. 2 fuel oil, or natural gas.

Applicable Compliance Method:

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

i. The emission testing shall be conducted within 6 months prior to permit expiration. In addition, testing shall be conducted as required by c)(1)a., if necessary.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for CO, NO_x, VOC and PM-10. When a scheduled/planned fuel switch occurs, emission testing shall be conducted within 60 days after the switch to the secondary fuel. Prior to secondary fuel use emission testing, the permittee shall consult the Ohio EPA, Central District Office to determine which pollutants should be tested.

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

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

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

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

PM-10 (use PE as a surrogate for PM-10), Methods 1-5 of 40 CFR Part 60, Appendix A

The VOC pounds per hour emission rate observed during the emission test shall be calculated in accordance with OAC paragraph 3745-21-10(C)(7) where the average molecular weight of the VOC emission 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 (in lb/hr) by 16 and dividing by 12.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity for CO, NO_x, VOC and PM-10 and while employing RAP for VOC, unless otherwise specified or approved by the Ohio EPA, Central District Office.

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

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

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

- b. Emissions Limitations:

SO₂ emissions shall not exceed 52.9 pounds per hour when burning on-spec used oil or No. 2 fuel oil.

SO₂ emissions shall not exceed 35.5 pounds per hour when burning natural gas.

Applicable Compliance Method:

Compliance with the SO₂ emissions limitation (while burning natural gas) was demonstrated through emission testing performed on July 9 and 10, 2015.

If required, compliance with the SO₂ limitations shall be performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

- c. Emissions Limitation:



Fugitive particulate emissions shall not exceed 5.20 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined by a sum of the following calculations:

- i. for the emissions from raw material loaded in the weigh hopper, 2.28 pounds of PE per hour derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times the emission factor of 0.0048 lb of PE per ton of raw material (AP-42, Table 11.12-2 dated 06/2006);
- ii. for the emissions from aggregate handling, 1.97 pounds of PE per hour derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times 0.60 ton of aggregate used per ton of raw material times the emission factor of 0.0069 lb of PE per ton of aggregate throughput (AP-42, Table 11.12-2 dated 06/2006);
- iii. for the emissions from sand handling, 0.40 pound of PE per hour period derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times 0.40 ton of sand used per ton of raw material times the emission factor of 0.0021 lb of PE per ton of sand throughput (AP-42 Table, 11.12-2 dated 06/2006);

- iv. for the emissions from silo filling (AP-42, Table 11.1-14 dated 03/2004):
 Emission factor = $0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)}$ = 0.000586 lb/ton asphalt

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(500 tons of asphalt/hour) X (0.000586 lb of PE/ton of asphalt produced) = 0.29 pound of PE/hour; and

- v. for the emissions from drum mix load-out (AP-42, Table 11.1-14 dated 03/2004):

Emission factor = $0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)}$ = 0.000522 lb/ton asphalt

where,



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V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(500 tons of asphalt/hour) X (0.000522 lb of PE/ton of asphalt produced)
= 0.26 pound of PE/ hour.

d. Emissions Limitation:

Fugitive PM-10 emissions shall not exceed 3.01 pounds per hour when burning on-spec used oil, No. 2 fuel oil, or natural gas.

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined by a sum of the following calculations:

- i. for the emissions from raw material loaded in the weigh hopper, 1.33 pounds of PM-10 per hour derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times the emission factor of 0.0028 lb of PM-10 per ton of raw material (AP-42, Table 11.12-2 dated 06/2006);
- ii. for the emissions from aggregate handling, 0.94 pound of PM-10 per hour derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times 0.60 ton of aggregate used per ton of raw material times the emission factor of 0.0033 lb of PM-10 per ton of aggregate throughput (AP-42, Table 11.12-2 dated 06/2006);
- iii. for the emissions from sand handling, 0.19 pound of PM-10 per hour period derived from 500 tons of asphalt produced per hour times 0.95 ton of raw material used per ton of asphalt produced times 0.40 ton of sand used per ton of raw material times the emission factor of 0.00099 lb of PM-10 per ton of sand throughput (AP-42 Table, 11.12-2 dated 06/2006);
- iv. for the emissions from silo filling (AP-42, Table 11.1-14 dated 03/2004):

$$\text{Emission factor} = 0.000332 + 0.00105(-V)e^{((0.0251)(T+460) - 20.43)} = 0.000586 \text{ lb/ton asphalt}$$

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(500 tons of asphalt/hour) X (0.000586 lb of PM-10/ton of asphalt produced) = 0.29 pound of PM-10/hour; and

- v. for the emissions from drum mix load-out (AP-42, Table 11.1-14 dated 03/2004):



$$\text{Emission factor} = 0.000181 + 0.00141(-V)e^{((0.0251)(T+460) - 20.43)} = 0.000522 \text{ lb/ton asphalt}$$

where,

V = asphalt volatility (- 0.5)*

T = HMA temperature (325°F)*

* Default values listed in AP-42

(500 tons of asphalt/hour) X (0.000522 lb of PM-10/ton of asphalt produced) = 0.26 pound of PM-10/ hour.

e. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

f. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

g. Emissions Limitations:

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

Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).



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h. Emissions Limitations:

PE from the stack shall not exceed 12.2 tons per rolling, 12-month period.

PM-10 emissions from the stack shall not exceed 12.2 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitations shall be determined by multiplying the observed stack emission rate from the most recent emission test, in pounds of PE per ton of asphalt produced, by the actual rolling 12-month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(6) above) and dividing by 2,000 pounds per ton.

i. Emissions Limitation:

Fugitive PE shall not exceed 5.20 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month fugitive PE limitation was established to reflect the emission unit's potential to emit taking into consideration the maximum annual asphalt production limitation established under b)(2)e. above. The rolling, 12-month fugitive PE limitation was established by a sum of the following calculations:

- i. for the emissions from raw material loaded in the weigh hopper, 2.28 tons of PE per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times the emission factor of 0.0048 lb of PE per ton of raw material divided by 2,000 pounds per ton (AP-42, Table 11.12-2 dated 06/2006);
- ii. for the emissions from aggregate handling, 1.97 tons of PE per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times 0.60 ton of aggregate used per ton of raw material times the emission factor of 0.0069 lb of PE per ton of aggregate throughput divided by 2,000 pounds per ton (AP-42, Table 11.12-2 dated 06/2006);
- iii. for the emissions from sand handling, 0.40 ton of PE per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times 0.40 ton of sand used per ton of raw material times the emission factor of 0.0021 lb of PE per ton of sand throughput divided by 2,000 pounds per ton (AP-42, Table, 11.12-2 dated 06/2006);

- iv. for the emissions from silo filling, 0.29 ton of PE per rolling 12-month period derived from 1,000,000 tons of asphalt produced times the emission factor of 0.000586 lb of PE per ton of asphalt produced for silo filling divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004); and
- v. for the emissions from asphalt loadout, 0.26 ton of PE per rolling 12-month period derived from 1,000,000 tons of asphalt produced times the emission factor of 0.000522 lb of PE per ton of asphalt produced for loadout divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004).

Compliance with the rolling, 12-month fugitive PE limitation may be assumed provided the permittee demonstrates compliance with the maximum annual asphalt production limitation through the recordkeeping requirements specified in d)(6) above.

j. Emissions Limitation:

Fugitive PM-10 emissions shall not exceed 3.01 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month fugitive PM-10 emissions limitation was established to reflect the emissions unit's potential to emit taking into consideration the maximum annual asphalt production limitation established under b)(2)e. above. The rolling, 12-month fugitive PM-10 emissions limitation was established by a sum of the following calculations:

- i. for the emissions from raw material loaded in the weigh hopper, 1.33 tons of PM-10 per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times the emission factor of 0.0028 lb of PM-10 per ton of raw material divided by 2,000 pounds per ton (AP-42, Table 11.12-2 dated 06/2006);
- ii. for the emissions from aggregate handling, 0.94 ton of PM-10 per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times 0.60 ton of aggregate used per ton of raw material times the emission factor of 0.0033 lb of PM-10 per ton of aggregate throughput divided by 2,000 pounds per ton (AP-42, Table 11.12-2 dated 06/2006);
- iii. for the emissions from sand handling, 0.19 ton of PM-10 per rolling 12-month period derived from 1,000,000 tons of asphalt produced times 0.95 ton of raw material used per ton of asphalt produced times 0.40 ton of sand used per ton of raw material times the emission factor of 0.00099

lb of PM-10 per ton of sand throughput divided by 2,000 pounds per ton (AP-42, Table, 11.12-2 dated 06/2006);

- iv. for the emissions from silo filling, 0.29 ton of PM-10 per rolling 12-month period derived from 1,000,000 tons of asphalt produced times the emissions factor of 0.000586 lb of PM-10 per ton of asphalt produced for silo filling divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004); and
- v. for the emissions from asphalt loadout, 0.26 ton of PM-10 per rolling 12-month period derived from 1,000,000 tons of asphalt produced times the emission factor of 0.000522 lb of PM-10 per ton of asphalt produced for loadout divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004).

Compliance with the rolling, 12-month fugitive PM-10 emissions limitation may be assumed provided the permittee demonstrates compliance with the maximum annual asphalt production limitation through the recordkeeping requirements specified in d)(6) above.

k. Emissions Limitation:

CO emissions shall not exceed 98.4 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. for the emissions from the baghouse stack, multiply the observed stack emission rate from the most recent emission test, in pounds of CO per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(6) above) and divide by 2,000 pounds per ton;
- ii. for the emissions from asphalt silo filling, 0.59 ton per rolling 12-month period derived from 1,000,000 tons of asphalt produced per rolling 12-month period times the emission factor of 0.00118 lb of CO per ton of asphalt produced divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004); and
- iii. for the emissions from asphalt loadout, 0.68 ton per rolling 12-month period derived from 1,000,000 tons of asphalt produced per rolling 12-month period times the emission factor of 0.00135 lb of CO per ton of asphalt produced divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004).

l. Emissions Limitation:



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NO_x emissions shall not exceed 20.0 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by multiplying the observed stack emission rate from the most recent emission test, in pounds of NO_x per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(6) above) and dividing by 2,000 pounds per ton.

m. Emissions Limitation:

SO₂ emissions shall not exceed 52.3 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by multiplying the observed stack emission rate from the most recent emission test, in pounds of SO₂ per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(6) above) and dividing by 2,000 pounds per ton.

n. Emissions Limitation:

VOC emissions shall not exceed 71.4 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. for the emissions from the baghouse stack, multiply the observed stack emission rate from the most recent emission test, in pounds of VOC per ton of asphalt produced, by the actual rolling 12 month summation of asphalt produced, in tons per rolling 12-month period, (as derived from the records required by d)(6) above) and divide by 2,000 pounds per ton;
- ii. for the emissions from asphalt silo filling, 6.00 tons per rolling 12-month period derived from 1,000,000 tons of asphalt produced per rolling 12-month period times the emission factor of 0.0120 lb of VOC per ton asphalt produced divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004); and
- iii. for the emissions from asphalt loadout, 1.93 tons per rolling 12-month period derived from 1,000,000 tons of asphalt produced per rolling 12-month period times the emission factor of 0.00386 lb of VOC per ton of asphalt produced divided by 2,000 pounds per ton (AP-42, Table 11.1-14 dated 03/2004).

o. Emissions Limitations:

No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gasses which contain PE in excess of 0.04 gr/dscf and exhibit 20 percent opacity, or greater.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the applicable testing requirements specified in 40 CFR Part 60, Subpart I, in accordance with 40 CFR 60.8 and 40 CFR 60.93.

(2) Burner Evaluation/Tuning

a. Introduction

The permittee is required to conduct periodic evaluation/tuning of the asphalt plant burner as set forth below. The purpose of this evaluation/tuning is to ensure that the burner is adjusted and maintained in order to make the burner as fuel efficient as possible.

b. Qualifications for Burner Evaluation/Tuning

Technicians who conduct the burner evaluation/tuning must be qualified to perform the expected burner evaluation/tuning tasks. In order to be qualified, the technician must have passed manufacturer's training concerning burner evaluation/tuning, or must have been trained by someone who has completed the manufacturer's training concerning burner evaluation/tuning. Burner evaluation/tuning technicians can be either permittee employees or outside parties.

c. Portable Monitor Requirements

Portable monitors used for burner evaluation/tuning shall be properly operated and maintained to monitor the concentration of NO_x, O₂ and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The owner or operator of the portable monitor shall maintain records of each portable monitoring device's calibration.

d. Burner Evaluation/Tuning Procedure

An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.

The burner shall be evaluated and, if necessary, tuned based on the frequency described in f)(2)e.

The general procedure for evaluating and, if necessary, tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally based on weather conditions and production.
- 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 NO_x, O₂, and CO. These measurements shall be taken at a location representative of stack emissions. Record the values in the "Pre-Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form (as found in g)(1)). An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.
- iv. Make any necessary adjustments and repairs to the burner in order to make the burner as fuel efficient as possible.
- v. If adjustments or repairs are made to the burner, then the technician shall re-measure the stack exhaust gas values for NO_x, O₂, and CO. This procedure shall be repeated until the technician is satisfied that the burner has been appropriately tuned. Once he/she is satisfied, then the technician shall record the post tune NO_x, O₂, and CO values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants (or equivalent) form.

Note that the Ohio EPA reserves the right to require permittees to conduct additional emissions tests to verify compliance. Operators who choose not to keep their burners in tune are more likely to be required by Ohio EPA to conduct additional emissions tests to verify compliance. Therefore, it is recommended that permittees make necessary adjustments and repairs to burners as soon as possible and verify that the burner is operating as designed.

- vi. Submit a copy of all Burner Evaluation/Tuning Reporting Form(s) for Asphalt Concrete Plants forms produced during the past calendar year to the Ohio EPA, Central District Office with the PER. Note: These forms are required to be submitted even if the burner is not actually adjusted.

- e. Burner Evaluation/Tuning Frequency

The permittee shall conduct the burner evaluation/tuning procedure within 30 production days after commencement of the production season in the State of



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Ohio. The permittee shall conduct another burner evaluation/tuning procedure within 15 production days before or after June 1st of each year and within 15 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 evaluation/tuning is not required if the production season ends prior to the associated evaluation/tuning due date. If the initial season evaluation/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 evaluation/tuning procedure required above, the permittee shall conduct the burner evaluation/tuning procedure within 20 production days from the date that a scheduled/planned fuel switch occurs.

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

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

Mercury: SW-846, Method 7471A;

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

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

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

g) Miscellaneous Requirements

- (1) Burner Evaluation/Tuning Form (See next page)

BURNER EVALUATION/TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS

Facility ID:	Evaluation/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 evaluation/tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

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

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

Evaluation/Tuning Results:

P Parameter	R	
	P Tuning	Pre Post Tuning²
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) ¹		
NOx concentrations (ppm) ²		
Oxygen concentrations (per cent) ²		

Asphalt Production (tons/hr)		
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¹ Specify whether on a dry or wet basis.

² 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.

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