



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

1/27/2009

Mr. Ralph Kyanko
Kokosing Materials Inc Plant 522
1539 Lowell St.
Elyria, OH 44035

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0228002002
Permit Number: P0104123
Permit Type: Initial Installation
County: Geauga

Certified Mail

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Plain Dealer. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

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

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

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



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Kokosing Materials, Inc. – Plant 522 is a proposed new installation of an asphalt plant comprising of the plant (P901) and facility roadways (F002) and storage piles (F001).

3. Facility Emissions and Attainment Status:

This facility will be installed in Geauga County which is currently non-attainment for ozone and attainment for all other criteria pollutants. The permittee requested a production limit of 590,000 tons per year in order to remain below 100 TPY to avoid Title V and PSD review.

4. Source Emissions:

The facility wishes to have the ability to burn natural gas, nos. 2, 4, and 6 fuel oils, and on-spec used oil. The highest lb/ton emission factor for each pollutant was used to create the TPY limits.

PTE: 300 TPH *8,760 hrs/yr = 2,628,000 TPY

PM = 2,628,000 x 0.038 lb/ton = 99,864 lbs / 2,000 = **49.9 TPY**

PM-10 = 2,628,000 x 0.0266 lb/ton = 69,904.8 lbs / 2,000 = **35.0 TPY**

VOC = 2,628,000 x 0.069 lb/ton = 181,332 lbs / 2,000 = **90.7 TPY VOC**

SO₂ = 2,628,000 x 0.314 lb/ton = 825,192 lbs / 2,000 = **412.6 TPY**

NO_x = 2,628,000 x 0.064 lb/ton = 168,192 lbs / 2,000 = **84.1 TPY**

CO = 2,628,000 x 0.336 lb/ton = 883,008 lbs / 2,000 = **441.5 TPY**

Restricted PTE: 590,000 TPY

PM = 590,000 x 0.038 lb/ton = 22,420 lbs / 2,000 = **11.2 TPY**

PM-10 = 590,000 x 0.0266 lb/ton = 15,694 lbs / 2,000 = **7.8 TPY**

VOC = 590,000 x 0.069 lb/ton = 40,710 lbs / 2,000 = **20.4 TPY VOC**

SO₂ = 590,000 x 0.314 lb/ton = 185,260 lbs / 2,000 = **92.6 TPY**

NO_x = 590,000 x 0.064 lb/ton = 37,760 lbs / 2,000 = **18.9 TPY**

CO = 590,000 x 0.336 lb/ton = 198,240 lbs / 2,000 = **99.1 TPY**

Actual emissions are expected to be far lower than the restricted PTE.

5. Conclusion:

In an effort to get this permit out quickly, the permittee has not asked for the ability to use blast furnace slag in the mix. If they decide they want to have that capability, they will submit a modification in the future.

A 590,000 TPY production restriction should effectively limit the PTE for this facility as requested.

6. Please provide additional notes or comments as necessary:

Air toxic modeling is not necessary as none of the HAP/toxic compounds listed in AP-42 as over 1 TPY are listed as air toxics the new rule.

This permit includes the ability to use virgin shingles as RAP. This has been copied out of the draft air permit issued to another one of their plants. This was approved by Alan Lloyd and Mike Hopkins after much research.

BAT applies to each pollutant for P901 as each pollutant is over 10 TPY allowable. Storage pile emissions are voluntarily limited through moisture content and watering to be less than 10 TPY to avoid BAT. Roadway emissions are not subject to BAT since uncontrolled emissions are less than 10 TPY. They are also not subject to the Chapter 17 rules due to location. F002 is a hollow permit because of this.

Ohio significant impact modeling for NOx and SO2 was requested and performed. It is an attachment to the permit.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	11.2
PM-10	7.8
VOC	20.4
SO2	92.6
NOx	18.9
CO	99.1

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
Kokosing Materials Inc Plant 522

Issue Date: 1/27/2009
Permit Number: P0104123
Permit Type: Initial Installation
Permit Description: 300 TPH asphalt plant, permitted to burn #2, #6, and used oils as well as natural gas, controlled by a baghouse (Plant 522)
Facility ID: 0228002002
Facility Location: Kokosing Materials Inc Plant 522
14948 Mayfield Rd,
East Claridon, OH 44033
Facility Description: Asphalt Paving Mixture and Block Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Dennis Bush at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road or (330)425-9171. The permit can be downloaded from the Web page: www.epa.state.oh.us/dapc



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

DRAFT

Air Pollution Permit-to-Install and Operate
for
Kokosing Materials Inc Plant 522

Facility ID: 0228002002
Permit Number: P0104123
Permit Type: Initial Installation
Issued: 1/27/2009
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Air Pollution Permit-to-Install and Operate
for
Kokosing Materials Inc Plant 522

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0228002002

Application Number(s): A0036366, A0036434

Permit Number: P0104123

Permit Description: 300 TPH asphalt plant, permitted to burn #2, #6, and used oils as well as natural gas, controlled by a baghouse (Plant 522)

Permit Type: Initial Installation

Permit Fee: \$2,700.00 *DO NOT send payment at this time - subject to change before final issuance*

Issue Date: 1/27/2009

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 522
14948 Mayfield Rd
East Claridon, OH 44033

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104123

Permit Description: 300 TPH asphalt plant, permitted to burn #2, #6, and used oils as well as natural gas, controlled by a baghouse (Plant 522)

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:	Storage Piles
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Roadways and Parking
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	KMI Plant 522
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

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

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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



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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F001, Storage Piles

Operations, Property and/or Equipment Description:

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)	3.1 tons/year of fugitive particulate matter of 10 microns or less (PM10) 6.2 tons/year of fugitive particulate emissions (PE)
b.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to the visible fugitive emissions from this emissions unit.
c.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to the emissions from this emissions unit.

(2) Additional Terms and Conditions

a. This permit takes into account the natural moisture content of the material stored as well as water application if necessary as a voluntary restriction as proposed



by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3). Sufficient moisture content provides 90 percent control of fugitive dust emissions.

- b. The permittee shall employ 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.

- c. 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.
- d. The permittee shall employ 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.
- e. 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.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the emission limit requirements of OAC rule 3745-31-05(E).

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

(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>
all	daily

(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>
all	daily

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

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

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

- 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;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).



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

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

- a. Emissions Limitations:

- 3.1 tons/year of fugitive PM10

- 6.2 tons/year of fugitive PE

- Applicable Compliance Method:

- Compliance with fugitive emission limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum throughput of 1,180,000 tons per year, a maximum storage surface area no greater than 7 acres, and a 90% overall control efficiency for PE/PM10.

g) Miscellaneous Requirements

- (1) None.



2. F002, Roadways and Parking

Operations, Property and/or Equipment Description:

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to the visible fugitive emissions from this emissions unit.
b.	OAC rule 3745-17-08(B)	In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to the emissions from this emissions unit.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the fugitive dust emissions from this emissions unit as the potential uncontrolled emissions of particulate matter less than 10 microns in diameter (PM-10) are less than 10 TPY.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) None.
- e) Reporting Requirements
 - (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- f) Testing Requirements
 - (1) None.
- g) Miscellaneous Requirements
 - (1) None.



3. P901, KMI Plant 522

Operations, Property and/or Equipment Description:

300 TPH drum-mix asphalt plant

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. d)(9)

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b, b)(2)f, b)(2)g, c)(4), d)(3), d)(4), e)(2), e)(4), f)(1)b and f)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p><u>Stack emissions while burning any fuel shall not exceed:</u></p> <p>0.030 gr/dscf of particulate matter (PM).</p> <p><u>Stack emissions while burning natural gas shall not exceed any of the following:</u></p> <p>0.004 lb of sulfur dioxide (SO₂)/ton of asphalt produced; and</p> <p>0.030 lb of nitrogen oxides (NO_x)/ton of asphalt produced.</p> <p><u>Stack emissions while burning no. 2 fuel oil shall not exceed any of the following:</u></p> <p>0.013 lb of SO₂/ton of asphalt produced; and</p> <p>0.063 lb of NO_x/ton of asphalt produced.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p><u>Stack emissions while burning on-spec used oil shall not exceed any of the following:</u></p> <p>0.099 lb of SO₂/ton of asphalt produced; and</p> <p>0.064 lb of NO_x/ton of asphalt produced.</p> <p><u>Stack emissions while burning no. 4 fuel oil shall not exceed any of the following:</u></p> <p>0.240 lb of SO₂/ton of asphalt produced; and</p> <p>0.063 lb of NO_x/ton of asphalt produced.</p> <p><u>Stack emissions while burning no. 6 fuel oil shall not exceed any of the following:</u></p> <p>0.314 lb of SO₂/ton of asphalt produced; and</p> <p>0.063 lb of NO_x/ton of asphalt produced.</p> <p>Volatile organic compound (VOC) emissions while burning any approved fuel shall not exceed 0.069 lb of VOC/ton of asphalt produced.</p> <p>Carbon monoxide (CO) emissions while burning any approved fuel shall not exceed 0.336 lb of CO/ton of asphalt produced.</p> <p>Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in b)(2)i.</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)a through b)(2)j.</p>
b.	OAC rule 3745-31-05(D)(1)(a)	<u>Stack emissions shall not exceed any of the following:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>PM less than 10 microns in diameter (PM-10) shall not exceed 7.8 tons per rolling, 12-month period (PM-10 is assumed to be no more than 70 percent of PM).</p> <p>VOC emissions shall not exceed 20.4 tons per rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 92.6 tons per rolling, 12-month period.</p> <p>NO_x emissions shall not exceed 18.9 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 99.1 tons per rolling, 12-month period.</p> <p><u>Asphalt load-out emissions:</u></p> <p>Emissions from load-out operations shall not exceed 0.40 ton CO per rolling, 12-month period, 0.15 ton PM/PM-10 per rolling, 12-month period and 1.1 tons of VOC per rolling, 12-month period.</p> <p><u>Asphalt silo filling emissions:</u></p> <p>Emissions from silo filling operations shall not exceed 0.35 ton CO per rolling, 12-month period, 0.17 ton PM/PM-10 per rolling, 12-month period and 3.5 tons VOC per rolling, 12-month period.</p> <p><u>Cold end fugitive dust emissions:</u></p> <p>Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 3.0 tons of PM/PM-10 per rolling, 12-month period.</p>
c.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-18-06(E) 40 CFR Part 60, Subpart I	The emission limitations required by these applicable rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-08(B)	See b)(2)k.



(2) Additional Terms and Conditions

- a. The drop height of the front-end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.
- b. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from conveyors and all transfer points to the dryer.
- c. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- d. Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10% opacity, as a 3-minute average.
- e. Visible particulate emissions from the stack shall not exceed 20% opacity, as a 3-minute average.
- f. All number 2 and on-spec used oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5%, by weight.
- g. All number 4 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.8%, by weight.
- h. All number 6 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 1.0%, by weight.
- i. All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC rule 3745-279-11, which restricts the used oil to the following limitations:

Contaminant/Property Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 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:



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

* Used oil containing more than 1,000 ppm 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 Ohio Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-10(B).

- j. The burning of used oil not meeting the above limitations is prohibited in this emissions unit. 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.
- k. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
- (2) The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation.
- (3) The permittee may not receive or burn any used oil which does not meet the specifications listed in b)(2)i of this permit without first obtaining a permit-to-install and operate that authorizes the burning of off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
- (4) The permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit.
 - a. the total amount of asphalt produced using any fuel is limited to 590,000 tons per rolling, 12-month period. To ensure enforceability during the first 12 calendar months of operation following the initial startup of this emissions unit, the permittee shall not exceed the production levels specified in the following table:



Month(s)	Maximum Allowable Cumulative Production (Tons)
1	150,000
1-2	300,000
1-3	450,000
1-4	590,000
1-5	590,000
1-6	590,000
1-7	590,000
1-8	590,000
1-9	590,000
1-10	590,000
1-11	590,000
1-12	590,000

- (5) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer’s recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for VOC, CO and NOx.
- (6) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in amounts not to exceed 50 percent of all aggregate materials in the raw material feed mix.

The permittee shall only use virgin aggregate, asphalt shingles and/or reclaimed asphalt pavement (RAP) in the raw material feed mix. For the purposes of this permit, virgin aggregate shall be clean, uncontaminated, quarried material.

No asbestos containing asphalt shingles may be used as part of the feed mix. Verification that the shingles do not contain asbestos can either be done by actual testing of a representative sample of the shingles, or by verification from the shingle manufacturer that the shingles do not contain asbestos. Records shall be kept documenting the asbestos verification of any shingles used in the feed mix.

- (7) The permittee shall only burn natural gas, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per the testing section of this permit.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating that the used oil meets the standards in OAC rule 3745-279-11 and does not contain quantifiable levels of PCBs:
 - 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;
 - vi. the PCB content, in ppm; and
 - vii. the flash point;
 - d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-10(B); and
 - e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

The metal contents for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a "Total Analysis" or "Total Metals" testing methodology. Chapter Two of "Testing Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)" should be referenced to for selecting appropriate test methods for the used oil analyses. Under no circumstances shall the metal contents of the used oil be analyzed using "TCLP", "EP-TOC", or other similar testing procedures, since these tests were developed to gauge leachate mobility from a landfill, of which is an irrelevant property of the used oil burned for energy recovery.

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



- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
- (3) The permittee shall maintain monthly records of the following information:
 - a. the total asphalt production for each month;
 - b. the total asphalt produced for each fuel type for each month;
 - c. for the first 12 calendar months following the initial startup of this emissions unit, the cumulative asphalt production and asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of emissions unit P901;
 - d. beginning after the first 12 calendar months following the startup of this emissions unit, the rolling, 12-month summation of the total asphalt production and the asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - e. the maximum percentage of RAP used for any mix type; and
 - f. the maximum percentage of shingles used for any mix type.
- (4) For each shipment of number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

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

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

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

- (8) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form [as



found in g)(2)]. An alternative form may be used upon approval of the Northeast District Office of Ohio EPA. The burner tuning form(s) shall be submitted with the annual permit evaluation report [see e)(10)].

- (9) Modeling to demonstrate compliance with, the AToxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit=s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month asphalt production limitation, and, for the first 12 calendar months of operation following the startup of this emissions unit, all exceedances of the maximum allowable cumulative production levels.
- (3) The permittee shall submit deviation (excursion) reports that identify any exceedance of the 50 percent (%) RAP/asphalt shingles content limitation.
- (4) The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (the Northeast District Office of Ohio EPA), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR Part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
- (5) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the sulfur content limitations specified above.
- (6) The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to minimize or eliminate any abnormal visible particulate emissions. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (7) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the enclosures for the rotary drum and the hot mix asphalt elevator serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions.



These reports shall be submitted to the Northeast District Office of Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (8) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from the areas other than the enclosures from the rotary drum and the hot mix asphalt elevator, and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (9) The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form to the Northeast District Office of Ohio EPA to summarize the results of each burner tuning procedure. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 31 of each year and shall cover the previous calendar year.
- (10) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitations:

The permittee shall comply with the emission limitations for the various types of fuels specified in b)(1)a.

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 60 days after achieving the maximum production rate for the primary fuel but no later than 120 days after initial startup of the emissions unit. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂ for the primary fuel. Prior to secondary fuel emissions testing, the permittee shall consult the Northeast District Office of Ohio EPA to determine which pollutants should be tested.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:



PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A;

NO_x, Methods 1 through 4 and 7 or 7E of 40 CFR Part 60, Appendix A;

SO₂, Methods 1 through 4 and 6 or 6C of 40 CFR Part 60, Appendix A;

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

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

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

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

- iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or on-spec used oil for PE, VOC, CO, NO_x and SO₂ and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Northeast District Office of Ohio EPA.
- v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of Ohio EPA. 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 Northeast District Office of Ohio EPA's refusal to accept the results of the emission test(s).
- vi. Personnel from the Northeast District Office of Ohio EPA 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.
- vii. 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 Northeast District Office of Ohio EPA 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 Northeast District Office of Ohio EPA.



b. Emission Limitations:

Stack emissions shall not exceed any of the following:

PM-10 shall not exceed 7.8 tons per rolling, 12-month period (PM-10 is assumed to be no more than 70 percent of PM).

VOC emissions shall not exceed 20.4 tons per rolling, 12-month period.

SO₂ emissions shall not exceed 92.6 tons per rolling, 12-month period.

NO_x emissions shall not exceed 18.9 tons per rolling, 12-month period.

CO emissions shall not exceed 99.1 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of applicable pollutant per ton of asphalt produced for each fuel, by the actual rolling, 12-month summation of asphalt produced for each fuel, in tons per rolling, 12-month period (as derived from the records required by d)(3), summing the results for all fuels, and dividing by 2000.

c. Emission Limitations:

Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in b)(2)i.

Applicable Compliance Method:

Compliance with the emission limitations for arsenic, cadmium and lead shall be demonstrated by the monitoring and record keeping in d)(1).

d. Emission Limitation:

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

Applicable Compliance Method:

Compliance with the limitations on visible emissions of fugitive dust shall be demonstrated by the monitoring and record keeping requirements specified in d)(6). Upon request by the Northeast District Office of Ohio EPA, compliance 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.



e. Emission Limitation:

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

Applicable Compliance Method:

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

f. Emission Limitation:

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

Applicable Compliance Method:

Upon request by the Northeast District Office of Ohio EPA, compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A, as such appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g. Emission Limitation:

Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 3.0 tons of PM/PM-10 per rolling, 12-month period. [AP-42 5th Edition, Table 11.12-2(10/01) and 11.1.2.5 (12/00)]

Applicable Compliance Method:

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

Fugitive emissions from the cold-end are calculated as follows:

Hopper loading:

$$590,000 \text{ tons of material/year} \times 0.0051 \text{ lb PE/ton of material} = 3,009 \text{ lbs PM/PM-10/yr}$$

Aggregate transfer:

$$354,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM/PM-10/ton of aggregate} = 2,443 \text{ lb PM/PM-10/yr}$$

Sand transfer:

$$236,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM/PM-10/ton of sand} = 496 \text{ lb PM/PM-10/yr}$$



The sum of the above is 5,945 lb PM/PM-10/yr X 1 ton/2000 lbs = 3.0 tons of PM/PM-10

h. Asphalt Load-out and Silo Filling Emission Limitations:

Emissions from load-out operations shall not exceed 0.40 ton CO per rolling, 12-month period, 0.15 ton PM/PM-10 per rolling, 12-month period and 1.1 tons of VOC per rolling, 12-month period.

Emissions from silo filling operations shall not exceed 0.35 ton CO per rolling, 12-month period, 0.17 ton PM/PM-10 per rolling, 12-month period and 3.5 tons VOC per rolling, 12-month period.

Applicable Compliance Methods:

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

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

Known:

V = -0.5 Asphalt volatility factor (default)

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

For silo filling, 1.4 percent of TOC is not VOC

AP-42 Table 11.1-16 dated 3/2004

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

<u>Activity</u>	<u>Pollutant</u>	<u>Predictive Emission Factor Equation, lb/ton</u>
Silo filling	PM/PM-10	$EF=0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	PM/PM-10	$EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$
Silo filling	VOC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load-out	VOC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
Silo filling	CO	$EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	CO	$EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

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

<u>Activity</u>	<u>Pollutant</u>	<u>lb/ton</u>	<u>tons/yr (at 590,000 tons/yr)</u>
Silo filling	PM/PM-10	5.86×10^{-4}	0.17



Load-out	PM/PM-10	5.22×10^{-4}	0.15
Silo filling	VOC	1.20×10^{-2}	3.5
Load-out	VOC	3.86×10^{-3}	1.1
Silo filling	CO	1.18×10^{-3}	0.35
Load-out	CO	1.35×10^{-3}	0.40

(2) Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emissions rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO_x, O₂ and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA-approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emission limitations as described in f)(1)a. The baselines shall be determined for NO_x, and CO. Sampling should measure the exhaust gas values exiting the dryer or the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form [as found in g)(2)] in the "Recent Stack Test Basis Values" column.



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

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O₂, NO_x, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to f)(2)d.v below.

The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat f)(2)d.iii and f)(2)d.iv until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

- v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
 - vi. By January 31 of each year, submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the Northeast District Office of Ohio EPA.
- e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the



facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

g) Miscellaneous Requirements

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

Source Number	Source Description	NSPS Regulation (Subpart)
P901	300 ton/hr asphalt plant	Subpart I

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

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

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

Reports are to be sent to the Northeast District Office of Ohio EPA.

- (2) Burner Tuning Form (see next page)



BURNER TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS	
Facility ID:	Tuning Date:
Legal Name:	Other Company Name (if different than legal name):
Mailing Address:	Other Company Site Address: (if different than mailing address):
City, State, Zip Code:	Other Company City, County, Zip Code:
Site Contact Person:	Site Contact Telephone Number:
Site Contact Title:	Site Contact Fax Number:
Name of company performing tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

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

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

Tuning Results:

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

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

²Specify whether on a dry or wet basis.

³If 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.



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104123

Facility ID: 0228002002

Effective Date: To be entered upon final issuance

Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

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