



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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Columbus, Ohio 43215

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

3/3/2009

Andy Brockhaus
BARRETT PAVING MATERIALS - READING BC 1
600 Shepherd Ave
Cincinnati, OH 45215

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1431443377
Permit Number: 14-06040
Permit Type: Initial Installation
County: Hamilton

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Hamilton County Dept. of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,


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

Cc: HCDOES

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



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

FINAL

**Air Pollution Permit-to-Install and Operate
for
BARRETT PAVING MATERIALS - READING BC 1**

Facility ID: 1431443377
Permit Number: 14-06040
Permit Type: Initial Installation
Issued: 3/3/2009
Effective: 3/3/2009
Expiration: 3/3/2014



Air Pollution Permit-to-Install and Operate
for
BARRETT PAVING MATERIALS - READING BC 1

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Permit Number: 14-06040
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Authorization

Facility ID: 1431443377
Application Number(s): A0011211
Permit Number: 14-06040
Permit Description: Chapter 31 Modification to PTI 14-05067.
Permit Type: Initial Installation
Permit Fee: \$1,650.00
Issue Date: 3/3/2009
Effective Date: 3/3/2009
Expiration Date: 3/3/2014
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

BARRETT PAVING MATERIALS - READING BC 1
387 Smalley Rd
Reading, OH 45215

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:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: 14-06040
Permit Description: Chapter 31 Modification to PTI 14-05067.

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



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Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-06040

Facility ID: 1431443377

Effective Date: 3/3/2009

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 Hamilton County Dept. of Environmental Services 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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-06040

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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.



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Division of Air Pollution Control

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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-06040

Facility ID: 1431443377

Effective Date: 3/3/2009

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

Final Permit-to-Install and Operate

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Facility ID: 1431443377

Effective Date: 3/3/2009

C. Emissions Unit Terms and Conditions



1. F001, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Paved and Unpaved Roadways

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)(4)	There shall be no visible particulate emissions from the paved roadways and parking areas except for a period of time not to exceed six minutes during any 60-minute observation period.
b.	OAC rule 3745-17-08(B)(5)	There shall be no visible particulate emissions from the unpaved roadways and parking areas except for a period of time not to exceed thirteen minutes during any 60-minute observation period.
c.	OAC rule 3745-17-08(B)	See b)(2)a. through b)(2)d.
d.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)e. and b)(2)f.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures on all 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 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 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 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.
- c. 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.
- d. 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.
- e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this air contaminant source because the calculated annual emission rate for PE is less than ten tons per year.
- f. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for PM10 is less than ten tons per year.

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>
all roads and parking areas	daily

- (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;
- 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 the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures. The information required in c)(3)d. 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) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

Particulate emissions (PE) from the roadways and parking areas shall not exceed 9.9 tons per year.

Particulate emissions ten microns or less in diameter (PM10) from the roadways and parking areas shall not exceed 9.9 tons per year.

Applicable Compliance Method:

Compliance with PE and PM10 emission limitations shall be determined by using the emission factor equations in Section 13.2.1 and 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved and unpaved roadways multiplied by 95% reduction for watering. Should further updates in AP-42 occur, the most current equations for paved and unpaved roads shall be used.



Paved:

$$PE = (4,760 \text{ VMT}) \times (0.0115 \text{ lbs PE/VMT}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.001 \text{ TPY PE}$$

$$PM_{10} = (4,760 \text{ VMT}) \times (0.006 \text{ lb PM}_{10}/\text{VMT}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.0007 \text{ TPY PM}_{10}$$

Unpaved:

$$PE = (2,240 \text{ VMT}) \times (2.17 \text{ lbs PE/VMT}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.12 \text{ TPY PE}$$

$$PM_{10} = (2,240 \text{ VMT}) \times (0.41 \text{ lb PM}_{10}/\text{VMT}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.02 \text{ TPY PM}_{10}$$

b. Emission Limitation:

There shall be no visible particulate emissions from the paved roadways and parking areas except for a period of time not to exceed six minutes during any 60-minute observation period.

There shall be no visible particulate emissions from the unpaved roadways and parking areas except for a period of time not to exceed thirteen minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE 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").

g) Miscellaneous Requirements

- (1) The terms and conditions contained in this permit for this emissions unit shall supersede all the air pollution control requirements for the emissions unit contained in the permit to install 14-04951 issued on September 28, 2000, and permit to install 14-01784 issued on December 20, 1989.



2. F002, 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 3745-17-07(B)(6)	There shall be no visible particulate emissions from the material storage piles except for a period of time not to exceed thirteen minutes during any 60-minute observation period.
b.	OAC rule 3745-17-08(B)	See b)(2)a. through b)(2)d.
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably 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, low pile heights and high moisture content 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 reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform the following: (high moisture content of storage piles, low pile heights and low drop heights) 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.
- e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for PE and PM10 is less than ten tons per year.

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	weekly

- (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	weekly



- (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	weekly

- (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).

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) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emissions Limitations:

Particulate emissions (PE) from the storage piles shall not exceed 9.9 tons per year.

Particulate emissions ten microns and less in diameter (PM10) from the storage piles shall not exceed 9.9 tons per year.

Applicable Compliance Method:

Compliance with PE and PM10 limitations shall be determined by using the wind erosion calculations found in AP-42, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures" (9/92) and the Load-in/Load-out calculations found in AP-42, Fifth Edition, Volume 1, Chapter 13.2.4.

Load-in/Load-out

$$\text{PE: } (0.01148 \text{ lbs/ton}) \times (765,000 \text{ tons per year}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2) = 0.44 \text{ TPY PE}$$

$$\text{PM10: } (0.00543 \text{ lbs/ton}) \times (765,000 \text{ tons per year}) \times (1.0 - 0.95) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2) = 0.21 \text{ TPY PM10}$$

*Total doubled to account for both load-in and load-out operations.

Wind Erosion

$$\text{PE: } (3783.5 \text{ lbs PE/day/acre}) \times (4.1 \text{ acres}) \times (1 \text{ lb}/2000 \text{ ton}) (1.0 - 0.95) = 0.39 \text{ TPY PE}$$

$$\text{PM10: } (0.39 \times 0.5) = 0.02 \text{ TPY PM10}$$

*PM10 is estimated to be half of the quantity of the PE emissions.

b. Emission 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 PE limitations for the storage piles identified 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").



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: 14-06040

Facility ID: 1431443377

Effective Date: 3/3/2009

g) Miscellaneous Requirements

- (1) The terms and conditions contained in this permit for this emissions unit shall supersede all the air pollution control requirements for the emissions unit contained in the permit to install 14-04951 issued on September 28, 2000, and permit to install 14-01784 issued on December 20, 1989.



3. P901, Asphalt Batch Plant

Operations, Property and/or Equipment Description:

375 Ton/hour Hot 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. 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. c)(2), d)(3), e(1), and e(2).
- 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</u></p> <p>Nitrogen oxides (NOx) emissions from the asphalt plant shall not exceed 25.80 pounds per hour while burning recycled oil.</p> <p>Sulfur dioxide (SO₂) emissions from the asphalt plant shall not exceed 26.28 pounds per hour while burning recycled oil.</p> <p>Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 16.32 pounds per hour while burning natural gas.</p> <p>Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 56.64 pounds per hour while burning recycled oil.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 14.40 pounds per hour while burning natural gas.</p> <p>Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 44.70 pounds per hour while burning recycled oil.</p> <p>Particulate emissions (PE) and particulate matter 10 microns and less in diameter (PM10) emissions (filterable) from the asphalt plant stack shall not exceed 0.04 grain (gr)/dry standard cubic feet (dscf).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).</p> <p>See b)(2)a. through b)(2)h, b)(2)k. and c)(1) through c)(5).</p>
b.	OAC rule 3745-21-08(B)	See b)(2)k.
c.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V and NSR	<p><u>Stack Emissions</u></p> <p>Nitrogen oxides (NOx) emissions from the asphalt plant shall not exceed 30.25 tons per rolling, 12-month period while burning recycled oil.</p> <p>Sulfur dioxide (SO₂) emissions from the asphalt plant shall not exceed 30.82 tons per rolling, 12-month period while burning recycled oil.</p> <p>Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 19.14 tons per rolling, 12-month period while burning natural gas.</p> <p>Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 66.42 tons per rolling, 12-month period while burning recycled oil.</p> <p>Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 16.89 tons per rolling, 12-month</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>period while burning natural gas.</p> <p>Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 52.41 tons per rolling, 12-month period while burning recycled oil.</p> <p>Particulate emissions (PE) and Particulate matter 10 microns and less in diameter (PM10) emissions from the asphalt plant stack shall not exceed 11.40 tons per rolling, 12-month period.</p> <p>See c)(2).</p> <p><u>Asphalt Load Out Emissions</u></p> <p>CO emissions shall not exceed 0.52 ton per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 1.48 tons per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.20 ton per rolling, 12-month period.</p> <p><u>Asphalt Silo Filling Emissions</u></p> <p>CO emissions shall not exceed 0.45 ton per rolling, 12-month period.</p> <p>PE/PM10 shall not exceed 0.23 ton per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 4.59 tons per rolling, 12-month period.</p> <p><u>Cold End Fugitive Dust Emissions</u></p> <p>Fugitive PE/PM10 emissions associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 5.40 tons per rolling, 12-month period for PE and 2.56 tons per rolling, 12-month period for PM10.</p>
d.	OAC rule 3745-31-05(E) Voluntary emission limitations to avoid BAT requirements	Nitrogen oxides (NOx) emissions from the asphalt plant are less than 9.9 tons per year while burning natural gas.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Sulfur dioxide (SO ₂) emissions from the asphalt plant are less than 9.9 tons per year while burning natural gas. See b)(2)i.
e.	40 CFR Part 60, Subpart I §60.92(a)(1) §60.92(a)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
i.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
j.	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
k.	OAC rule 3745-279-11	See b)(2)h.

(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 percent opacity, as a 3-minute average.



- e. Visible particulate emissions from the stack shall not exceed 20 percent opacity, as a six-minute average.
- f. All number 2 and “on-specification” (on-spec) used oil burned in this emission unit shall have a sulfur content equal to or less than 0.5 percent, by weight.
- g. All number 4 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 0.8 percent, by weight.
- h. All used oil burned in this emissions unit shall be on-spec oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
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 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).

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.

- i. Compliance with OAC rule 3745-31-05(A)(3) does not apply to the following emissions since these emissions are less than 10 tons per year after controls:

- PE and PM10 emissions from fugitive dust;
- NOx emissions while burning natural gas, and;
- SO2 emissions while burning natural gas.

The permittee voluntarily agrees to control PE emissions by the use of a baghouse. Compliance with OAC rule 3745-31-05(A)(3) for all other pollutants



other than the ones specified above, shall be demonstrated by compliance with the short-term emissions limitations, compliance with the rolling, 12-month operational restriction, compliance with the annual emissions limitations, compliance with the visible emissions limitations, and compliance with the operational restrictions regarding the use of used oil, maintenance of the fuel burner, use of RAP and latex, and fuel restrictions.

- j. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- k. The permittee shall satisfy 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 (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

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. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision 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 permittee may not receive or burn any used oil which does not meet the specifications listed in b)(2)h. of this permit without first obtaining a permit-to-install 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.
- (2) The permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit. The total amount of asphalt produced using any fuel shall be limited to 765,000 tons per rolling 12-month period. Compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates. The permittee has existing records to comply with the production limitation upon permit issuance.
- (3) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations.
- (4) The permittee shall only burn natural gas, number 2 fuel oil, number 4 fuel oil, and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per f)(1)a.
- (5) The permittee shall be permitted to 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 may substitute latex in the raw material feed mix in



amounts not to exceed 6 percent of all aggregate materials on an hourly basis. The permittee shall not substitute materials for the aggregate such as slag, rubber, etc. without prior approval from Ohio EPA.

- (6) The permittee shall only use virgin aggregate, crushed/recycled concrete, asphalt shingles and reclaimed asphalt pavement (RAP) in the raw material feed mix. For the purpose of this permit, virgin aggregate shall be clean, uncontaminated, quarried material.
- (7) No asbestos containing asphalt shingles shall be used as part of the feed mix. 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 of 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. These records shall be maintained following the Standard Terms and Conditions Records Retention Requirement term.

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 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 "Totals 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 appropriate Ohio EPA District Office or local air agency) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

- (2) The permittee shall properly install, operate, and maintain equipment to monitor and record the pressure drop in inches of water, across the baghouse, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop in inches of water, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable pressure drop range across the baghouse shall be: 0.5 to 8.0 inches of water while the emissions unit is in operation.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the



allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall maintain monthly records of the following information for emissions unit P901:
 - a. the total asphalt production, in tons for each month;
 - b. the total asphalt produced for each fuel type for each month;
 - c. the rolling, 12 month summation of the total asphalt production, and asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - d. the rolling, 12-month summation of the PE, PM10, SO₂, NO_x, VOC and CO emissions; and
 - e. the maximum percentage of RAP and/or other substitute/additive used for any mix type.
- (4) For each shipment of number 2 fuel oil, number 4 fuel oil and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the 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 a maintenance operations log. If visible emissions are observed, the permittee shall also note the following in the maintenance 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 areas other than the stack) serving this emissions unit. The presence or absence of any visible emissions shall be noted in a maintenance log. If visible emissions are observed, the permittee shall also note the following in the maintenance log:
 - a. the location and color of the emissions;
 - b. the cause of the visible particulate emissions;
 - c. the total duration of any visible emissions incident; and
 - d. any corrective actions taken to minimize or eliminate the visible emissions.

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)(6)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.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling 12-month asphalt production limitation. These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling 12-month total PE, PM10, SO₂, NO_x, VOC and CO emission limitations. These reports are due by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.
- (3) 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	375 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:

Hamilton County Department of Environmental Services
250 William H. Taft Road
Cincinnati, OH 45219.

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

f) Testing Requirements

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

a. Emission Limitations:

Nitrogen oxides (NOx) emissions from the asphalt plant shall not exceed 25.80 pounds per hour while burning recycled oil; Sulfur dioxide (SO₂) emissions from the asphalt plant shall not exceed 26.28 pounds per hour while burning recycled oil; Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 16.32 pounds per hour while burning natural gas; Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 56.64 pounds per hour while burning recycled oil; Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 14.40 pounds per hour while burning natural gas; Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 44.70 pounds per hour while burning recycled oil; PE/PM10 while burning any approved fuel shall not exceed 0.04 gr/dscf.

Applicable Compliance Method

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

- i. The emission testing shall be conducted within 12 months of permit renewal.



ii. The emission testing shall be conducted to demonstrate compliance with the allowable PE, VOC, NO_x, SO₂ and CO limitations.

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

- PE - Methods 1, 2, 3, 4, and 5 of 40 CFR Part 60, Appendix A;
- VOC - Method 25 of 40 CFR Part 60, Appendix A;
- NO_x - Method 7E of 40 CFR Part 60, Appendix A;
- SO₂ - Method 6 of 40 CFR Part 60, Appendix A;
- CO - Method 10 of 40 CFR Part 60, Appendix A.

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, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

b. Emission Limitation:

Nitrogen oxides (NO_x) emissions are less than 9.9 tons per year while burning natural gas. Nitrogen oxides (NO_x) emissions from the asphalt plant shall not exceed 30.25 tons per year while burning recycled oil.



Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of NO_x 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) above), summing the results for all fuels, and dividing by 2000.

The potential to emit for NO_x was calculated using information acquired from compliance testing of P901 that took place on April 22 and 23, 2008:

Gas: $0.0217 \text{ lbs NO}_x \text{ per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 9.98 \text{ TPY of NO}_x$.

Oil: $0.0659 \text{ lbs NO}_x \text{ per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 30.25 \text{ TPY of NO}_x$.

c. Emission Limitation:

Sulfur dioxide (SO₂) emissions are less than 9.9 tons per year while burning natural gas. Sulfur dioxide (SO₂) emissions from the asphalt plant shall not exceed 30.82 tons per year while burning recycled oil.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of SO₂ 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) above), summing the results for all fuels, and dividing by 2000.

The potential to emit for SO₂ was calculated using information acquired from compliance testing of P901 that took place on April 22 and 23, 2008:

Gas: $0.0115 \text{ lbs SO}_2 \text{ per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 5.29 \text{ TPY of SO}_2$.

Oil: $0.0671 \text{ lbs SO}_2 \text{ per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 30.82 \text{ TPY of SO}_2$.

d. Emission Limitation:

Carbon monoxide (CO) emissions from the asphalt plant shall not exceed 19.14 tons per year while burning natural gas and 66.42 tons per year while burning recycled oil.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of CO per ton of asphalt produced



for each fuel, by the actual rolling 12 month summation of asphalt produced for each fuel, in tons per rolling 12-month period (as derived from the records required by d)(3) above), summing the results for all fuels, and dividing by 2000.

The potential to emit for CO was calculated using information acquired from compliance testing of P901 that took place on April 22 and 23, 2008:

Gas: $0.0417 \text{ lbs CO per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 19.14 \text{ TPY of CO.}$

Oil: $0.1447 \text{ lbs CO per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 66.42 \text{ TPY of CO.}$

e. Emission Limitation:

Volatile organic compound (VOC) emissions from the asphalt plant shall not exceed 16.89 tons per year while burning natural gas and 52.41 tons per year while burning recycled oil.

Applicable Compliance Method:

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

The potential to emit for VOC was calculated using information acquired from compliance testing of P901 that took place on April 22 and 23, 2008:

Gas: $0.0368 \text{ lbs VOC per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 120\% \times 1 \text{ Ton}/2000 \text{ lbs} = 16.89 \text{ TPY of VOC.}$

Oil: $0.1370 \text{ lbs VOC per ton asphalt} \times 765,000 \text{ tons asphalt per year} \times 1 \text{ Ton}/2000 \text{ lbs} = 52.41 \text{ TPY of VOC.}$

f. Emission Limitation:

PE/PM10 emissions shall not exceed 11.40 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of PE/PM10 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) above), summing the results for all fuels, and dividing by 2000.

The potential to emit PE/PM10 was calculated using information submitted by the permittee in permit to install (PTI) application 14-06040, submitted April 7, 2008:



$0.04 \text{ gr/dscf} \times 32,591 \text{ dscf/min} \times 60 \text{ mins/hr} \times 1 \text{ lb/7000 gr} \times 1 \text{ hr/375 tons} \times 765,000 \text{ tons/year} \times 1 \text{ Ton/2000 lbs} = 11.40 \text{ TPY of PE/PM}_{10}$.

g. Emission Limitations:

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

Applicable Compliance Method:

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

h. Emission Limitation:

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

Applicable Compliance Method:

Compliance with the limitation on visible emissions of fugitive dust found in b)(2) of this permit shall be demonstrated by the monitoring and record keeping in d)(6). Upon request by the appropriate Ohio EPA District Office or local air agency, 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.

i. Emission Limitation:

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

Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, 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.

j. Emission Limitation:

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



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 12 months prior to permit renewal to demonstrate compliance with the visible emission limitation;
- ii. compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9;
- iii. not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s);
- iv. personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment; and
- v. a comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

k. 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 5.40 tons of PE per rolling 12-month period and 2.56 tons of PM10 per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be calculated based upon the following worst case calculations (Emission factors based on AP-42, 5th Edition, Table 11.12-2, 10/2001):

Fugitive emissions from the cold end are calculated as follows:



Hopper loading:

765,000 tons of material/year X 0.0051 lb of PE/ton of material = 3902 lbs of PE/yr; and

765,000 tons of material/year X 0.0024 lb of PM10/ton of material = 1836 lbs of PM10/yr.

Aggregate transfer:

765,000 tons of aggregate/year X 0.0069 lb of PE/ton of aggregate = 5279 lbs of PE/yr; and

765,000 tons of aggregate/year X 0.0033 lb of PM10/ton of aggregate = 2525 lbs of PM10/yr.

Sand transfer:

765,000 tons of sand/year X 0.0021 lb of PE/ton of sand = 1607 lbs of PE/yr; and

765,000 tons of sand/year X 0.00099 lb of PM10/ton of sand = 758 lbs of PM10/yr.

The sum of the above is 10788 lbs of PE/yr X 1 ton/2000 lbs = 5.40 tons of PE; and

The sum of the above is 5119 lb of PM10/yr X 1 ton/2000 lbs = 2.56 tons of PM10.

I. Asphalt Load out and Silo Filling Emissions:

Emissions from load out operations shall not exceed 0.52 ton of CO per rolling 12-month period, 0.20 ton of PE per rolling 12-month period and 1.48 tons of VOC per rolling 12-month period.

Emissions from silo filling operations shall not exceed 0.45 ton of CO per rolling 12-month period, 0.23 ton of PE per rolling 12-month period and 4.59 tons of VOC per rolling 12-month period.

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

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

Known:

V = -0.5 Asphalt volatility factor (default) T = 325 HMA mix temp (F) (default)

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	PE	$EF=0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$
Load out	PE	$EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$
Silo filling	VOC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load out	VOC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
Silo filling	CO	$EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$
Load out	CO	$EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

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

<u>Activity</u>	<u>Pollutant</u>	<u>lb/ton</u>	<u>tons/yr (at 765,000 tons/yr production)</u>
Silo filling	PE	5.86×10^{-4}	0.23
Load out	PE	5.22×10^{-4}	0.20
Silo filling	VOC	1.20×10^{-2}	4.59
Load out	VOC	3.86×10^{-3}	1.48
Silo filling	CO	1.18×10^{-3}	0.45
Load out	CO	1.35×10^{-3}	0.52

The PM10 emissions are assumed equivalent to the PE.

- (2) Compliance with the production limitation in c)(2) shall be demonstrated by the monitoring and record keeping in d)(3).
- g) Miscellaneous Requirements
 - (1) The terms and conditions contained in this permit for this emissions unit shall supersede all the air pollution control requirements for the emissions unit contained in the permit to install 14-04951 issued on September 28, 2000, permit to install 14-01784 issued on December 20, 1989, and permit to install 14-05067 issued on May 17, 2001.