



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

7/9/2009

Kevin Steward  
Westfall Aggregate and Materials, Inc.  
6790 Brooks-Miller Road  
Circleville, OH 43113

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0165010135  
Permit Number: P0104653  
Permit Type: Renewal  
County: Pickaway

Certified Mail

No	TOXIC REVIEW
No	PSD
No	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](http://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 Ohio EPA DAPC, Central District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: Ohio EPA-CDO

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  
Westfall Aggregate and Materials, Inc.**

Facility ID: 0165010135  
Permit Number: P0104653  
Permit Type: Renewal  
Issued: 7/9/2009  
Effective: 7/9/2009  
Expiration: 7/9/2014





**Air Pollution Permit-to-Install and Operate**  
for  
Westfall Aggregate and Materials, Inc.

**Table of Contents**

- Authorization ..... 1
- A. Standard Terms and Conditions ..... 3
  - 1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
  - 2. Who is responsible for complying with this permit? ..... 4
  - 3. What records must I keep under this permit? ..... 4
  - 4. What are my permit fees and when do I pay them?..... 4
  - 5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
  - 6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
  - 7. What reports must I submit under this permit? ..... 5
  - 8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? ..... 5
  - 9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?... 5
  - 10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 5
  - 11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
  - 12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
  - 13. Can I transfer this permit to a new owner or operator?..... 6
  - 14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
  - 15. What happens if a portion of this permit is determined to be invalid? ..... 7
- B. Facility-Wide Terms and Conditions..... 8
- C. Emissions Unit Terms and Conditions ..... 10
  - 1. B003, B003 ..... 11
  - 2. B004, B004 ..... 16
  - 3. F001, F001 ..... 21
  - 4. F002, F002 ..... 25
  - 5. F003, F003 ..... 31
  - 6. F004, F004 ..... 37
  - 7. F005, F005 ..... 41
  - 8. F006, F006 ..... 46
  - 9. P901, P901 ..... 51





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**  
**Permit Number:** P0104653  
**Facility ID:** 0165010135  
**Effective Date:** 7/9/2009

## Authorization

Facility ID: 0165010135  
Application Number(s): A0037229  
Permit Number: P0104653  
Permit Description: Renewal of permits to install  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 7/9/2009  
Effective Date: 7/9/2009  
Expiration Date: 7/9/2014  
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15  
This document constitutes issuance to:

Westfall Aggregate and Materials, Inc.  
19952 London Road  
Circleville, OH 43113

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0104653  
 Permit Description: Renewal of permits to install

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>F001</b>
Company Equipment ID:	F001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F002</b>
Company Equipment ID:	F002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F003</b>
Company Equipment ID:	F003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F004</b>
Company Equipment ID:	F004
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F005</b>
Company Equipment ID:	F005
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F006</b>
Company Equipment ID:	F006
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	P901
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

## **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 Ohio EPA DAPC, Central District Office in accordance with OAC



rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

**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

**Final Permit-to-Install and Operate**

**Permit Number: P0104653**

**Facility ID: 0165010135**

**Effective Date: 7/9/2009**

## **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:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

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**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

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



**1. B003, B003**

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

400HP diesel fired dredge engine

- 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. b)(1)b, c)(1), d)(3), e)(1), and f)(1)g
- 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>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 12.4 lbs/hour and 12.4 tons/year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 2.67 lbs/hour and 2.67 tons/year</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 0.99 lb/hour and 0.99 ton/year.</p> <p>Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.82 lb/hour and 0.82 tons/year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules,3745-17-07(A)(1) and 3745 17 11(B)(5)(a)</p>
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V]	NO <sub>x</sub> emissions shall not exceed 12.4 tons/year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		CO emissions shall not exceed 2.67 tons/year  VOC emissions shall not exceed 0.99 ton/year.  SO <sub>2</sub> emissions shall not exceed 0.82 tons/year.  See c)(1).
c.	OAC rule 3745-17-11(B)(5)(a)	The particulate emissions from the engine's exhaust shall not exceed 0.31 pound per million Btu of actual heat input.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity, as a six (6)-minute average, except as provided by the rule.
e.	OAC rule 3745-18-06(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly emissions limitations for this emissions unit were established to reflect the potential to emit. Therefore, with the exception of the fuel oil analysis, it is not necessary to develop additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these limits.
- b. OAC rule 3745-18-06(B) exempts stationary internal combustion engines which have rated heat input capacities equal to, or less than, 10 MMBtu / hr from the sulfur dioxide emission limit in OAC rule 3745-18-06(G). This emissions unit has a rated heat input of less than 10 MMBtu / hr.
- c. The permittee shall burn only no. 2 fuel oil in this emissions unit.
- d. The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.

c) Operational Restrictions

- (1) The maximum operating hours for this emissions unit shall not exceed 2000 hours as a rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of any oil that is received for burning in this emission unit.



The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon approval by the Ohio EPA, Central District Office.

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

- a. the number of operating hours for each month; and
- b. the rolling, 12-month summation of operating hours.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

The maximum operating hours for this emissions unit shall not exceed 2000 hours as a rolling, 12-month summation.

- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Ohio EPA, Central District Office).

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

f) Testing Requirements

(1) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):

- a. Emission limitation: NO<sub>x</sub> emissions shall not exceed 12.4 lbs/hour.



Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.031 (lb/hp-hr emission factor for NO<sub>x</sub>; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 7E.

- b. Emission limitation: CO emissions shall not exceed 2.67 lbs/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00668 (lb/hp-hr emission factor for CO; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 10.

- c. Emission limitation: VOC emissions shall not exceed 0.99 lb/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00247 (lb/hp-hr emission factor for VOC; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 18.

- d. Emission limitation: SO<sub>2</sub> emissions shall not exceed 0.82 lb/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00205 (lb/hp-hr emission factor for SO<sub>x</sub>; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6C.

- e. Emission limitation: The particulate emissions from the engine's exhaust shall not exceed 0.31 pound per million Btu of actual heat input.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.0021 (lb/hp-hr emission factor for PE; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 5.

- f. Emission limitation: Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- g. Emission limitation: NO<sub>x</sub> emissions shall not exceed 12.4 tons/year, CO emissions shall not exceed 2.67 tons/year, VOC emissions shall not exceed 0.99 ton/year, and SO<sub>2</sub> emissions shall not exceed 0.82 ton/year.



Applicable compliance method: Compliance with these annual limitations shall be assumed as long as compliance with the hourly emissions and annual operating limitations is maintained (the annual limitations were calculated by multiplying by 2,000 and then dividing by 2,000).

- h. Emission limitation: The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.
- i. Applicable compliance method: Compliance shall be demonstrated by the record keeping requirements pursuant to d)(2).

g) Miscellaneous Requirements

- (1) None.



**2. B004, B004**

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

400HP diesel fired dredge engine

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 12.4 lbs/hour and 12.4 tons/year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 2.67 lbs/hour and 2.67 tons/year</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 0.99 lb/hour and 0.99 ton/year.</p> <p>Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.82 lb/hour and 0.82 tons/year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules, 3745-17-07(A)(1) and 3745 17 11(B)(5)(a)</p>
b.	OAC rule 3745 17 11(B)(5)(a)	The particulate emissions from the engine's exhaust shall not exceed 0.31 pound per million Btu of actual heat input.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity, as a six (6)-minute average, except as provided by the rule.
d.	OAC rule 3745 18 06(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly emissions limitations for this emissions unit were established to reflect the potential to emit. Therefore, with the exception of the fuel oil analysis, it is not necessary to develop additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these limits.
- b. The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.31 pound per million Btu of actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- c. OAC rule 3745 18 06(B) exempts stationary internal combustion engines which have rated heat input capacities equal to, or less than, 10 mmBtu/hr from the sulfur dioxide emission limit in OAC rule 3745 18 06(G). This emissions unit has a rated heat input of less than 10 MMBTU/hr.
- d. The permittee shall burn only no. 2 fuel oil in this emissions unit.
- e. The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.

c) Operational Restrictions

- (1) The maximum operating hours for this emissions unit shall not exceed 2000 hours as a rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than no. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of any oil that is received for burning in this emission unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon approval by the Ohio EPA, Central District Office.
- (3) The permittee shall maintain monthly records of the operating hours for each month.



e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

The maximum operating hours for this emissions unit shall not exceed 2000 hours as a rolling, 12-month summation.

- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Ohio EPA, Central District Office).

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

f) Testing Requirements

(1) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):

- a. Emission limitation: NO<sub>x</sub> emissions shall not exceed 12.4 lbs/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.031 (lb/hp-hr emission factor for NO<sub>x</sub>; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 7E.

- b. Emission limitation: CO emissions shall not exceed 2.67 lbs/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00668 (lb/hp-hr emission factor for CO ; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate



compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 10.

- c. Emission limitation: VOC emissions shall not exceed 0.99 lb/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00247 (lb/hp-hr emission factor for VOC; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 18.

- d. Emission limitation: SO<sub>2</sub> emissions shall not exceed 0.82 lb/hour.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.00205 (lb/hp-hr emission factor for SO<sub>x</sub>; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 6C.

- e. Emission limitation: The particulate emissions from the engine's exhaust shall not exceed 0.31 pound per million Btu of actual heat input.

Applicable compliance method: Compliance shall be determined by multiplying the maximum engine horsepower (400 hp) by 0.0021 (lb/hp-hr emission factor for PE; AP-42 10/96 Table 3.3-1). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Method 5.

- f. Emission limitation: Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- g. Emission limitation: NO<sub>x</sub> emissions shall not 12.4 tons/year, CO emissions shall not exceed 2.67 tons/year, VOC emissions shall not exceed 0.99 ton/year, and SO<sub>2</sub> emissions shall not exceed 0.82 ton/year.

Applicable compliance method: Compliance with these annual limitations shall be assumed as long as compliance with the hourly emissions and annual operating limitations is maintained (the annual limitations were calculated by multiplying by 2000, and then dividing by 2000).

- h. Emission limitation: The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.

Applicable compliance method: Compliance shall be demonstrated by the record keeping requirements pursuant to d)(2).



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

g) Miscellaneous Requirements

(1) None.



**3. F001, F001**

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

Material handling for 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. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions shall not exceed 0.49 ton per year.</p> <p>No visible particulate emissions except for 3 minutes during any 60-minute period.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust</p> <p>See b)(2)b, b)(2)c and b)(2)d.</p>

(2) Additional Terms and Conditions

a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:



All truck dumping operations

All conveyor transfer operations

All front end loader loading and unloading operations

- b. The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
All truck dumping operations	maintain sufficient moisture
All conveyor transfer operations	maintain sufficient moisture
All front end loader loading and unloading operations	maintain sufficient moisture

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s):</u>	<u>minimum inspection frequency</u>
All truck dumping operations	daily



All conveyor transfer operations daily

All front end loader loading and unloading operations daily

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.
- (3) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that the consistently applied control measures were not effective;
  - c. the dates additional control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days additional control measure(s) was (were) implemented.

The information in d)(4)d shall be kept separately for each material handling operation identified above, 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) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):
  - a. Emissions limitation: No visible particulate emissions except for 3 minutes during any 60-minute period.  
  
Applicable compliance method: If required, compliance with the visible emission limitation for RAP, sand, gravel and limestone material handling identified in this permit shall be determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.
  - b. Emissions Limitation: PE emissions shall not exceed 0.49 ton per year.



Applicable compliance method: Compliance with the annual emissions limitation shall be determined by the summation of emissions from the various material handling operations.

Material handling emissions are determined based upon the following equation as found in (AP-42, Fifth edition, Section 13.2.4 (1/95))

$$E = k(0.0032) * ((U/5)^{1.3} / (M/2)^{1.4}) \text{ lbs/ton}$$

where:

E = emission factor for aggregate unloading

k = particle size multiplier = 0.74 for PE

U = mean wind speed (mph) = 8.1

M = material moisture content = 4% for all materials except RAP (5%)

$$E = 0.74 (0.0032) * ((8.1/5)^{1.3} / (4/2)^{1.4}) \text{ lbs/ton} = 0.00168 \text{ lb of PE/ton.}$$

The total emissions from the material handling operations is determined by use of the above emission factor and the annual process weight rate for each material handling operations, as described below:

<u>Material Handling Operation</u>	<u>Annual PWR In Tons</u>	<u>Annual Emissions In Tons</u>
Dumping Coarse Aggregate	100,000	0.084
Dumping Fine Aggregate	58,000	0.049
Dumping RAP	100,000	0.06
Dumping Limestone	60,000	0.05
Front end loader Coarse Aggregate	100,000	0.084
Front end loader Fine Aggregate	58,000	0.049
Front end loader RAP	100,000	0.06
Front end loader Limestone	60,000	0.05

Therefore, the total annual emissions from the load in/load out activities equals 0.49 Tons.

g) Miscellaneous Requirements

- (1) None.



**4. F002, F002**

**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
<b>Paved roadways and parking areas</b>		
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 2.6 tons per year.  No visible particulate emissions except for one minute during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See b)(2)c, b)(2)e, b)(2)f, b)(2)g, b)(2)h, and b)(2)i.
<b>Unpaved roadways and parking areas</b>		
b.	OAC rule 3745-31-05(A)(3)	No visible particulate emission except for 3 minutes during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emissions of fugitive dust.  See b)(2)d, b)(2)e, b)(2)f, b)(2)g, b)(2)h, and b)(2)i.

(2) Additional Terms and Conditions

- a. The paved roadways and parking areas are covered by this permit and subject to the above-mentioned requirements.
- b. The unpaved roadways and parking areas are covered by this permit and subject to the above-mentioned requirements.
- c. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. 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 a paved or unpaved 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- f. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.



- g. 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.
- h. 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.
- i. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

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 the roadways and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All	daily
<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All	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 may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) 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 control measures other than periodic watering;



- c. the dates that control measures (including periodic watering) were not implemented; and
- d. on a calendar quarter basis, the total number of days the control measures other than periodic watering 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 d)(4)d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, 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) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):

- a. Emission limitation: For paved roadways and parking areas, no visible particulate emissions except for one minute during any 60-minute period. For unpaved roadways and parking areas, no visible particulate emission except for 3 minutes during any 60-minute period.

Applicable compliance method: If required, compliance with the visible emission limitation for the paved and unpaved roadways and parking areas identified in this permit shall be determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

- b. Emissions limitation: PE emissions shall not exceed 2.6 tons per year.

Applicable compliance method: Compliance with the annual emissions limitation shall be determined by the summation of particulate emissions from the paved roadways and unpaved roadways. The particulate emissions from the paved roadways are determined by using equation 1 found in Chapter 13.2.1.3 (10/2002) of AP-42:

Paved roadways:

$$E = k(s/2)^{0.65} (W/3)^{1.5}$$

where:



E = emission factor lbs/VMT  
 k = particle size multiplier = 0.082  
 sL = silt loading on road surface = 5.2 g/m<sup>2</sup>  
 W = average vehicle weight (tons) = 23.4

$$E = 3.3219 \text{ lbs PM/VMT}$$

Taking into account the natural mitigation of all precipitation, where p = 140,

$$E' = 3.3219 \text{ lbs PM/VMT} * ((365-p)/365) = 2.05 \text{ lbs PM/VMT}$$

The maximum miles traveled per year equals 2,500 miles. Therefore, the particulate matter emissions from paved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 2.00 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1 - 0.95), resulting in a controlled emissions rate of 0.128 ton/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The particulate emissions from the unpaved roadways are determined by using equation 2 found in Chapter 13.2.2.2 (09/1998) of AP-42:

Unpaved roadways:

$$E = ((365-p)/365) k(s/12)^a (W/3)^b$$

E = emission factor lbs/VMT  
 k = particle size multiplier = 4.9  
 sL = silt loading on road surface = 5.95 g/m<sup>2</sup>  
 W = average vehicle weight (tons) = 24.3  
 a,b = constants from table 13.2.2-2; a= 0.7; b= 0.45;  
 p = number of days with at least 0.01 inches of precipitation per year (140).

The maximum miles traveled per year equals 20,000 miles. Therefore, the particulate matter emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 4.65868 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-0.95), resulting in a controlled emissions rate of 2.33 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

Unpaved Parking:

$$E = ((365-p)/365) k(s/12)^a (W/3)^b$$

E = emission factor lbs/VMT  
 k = particle size multiplier = 4.9  
 sL = silt loading on road surface = 4.8 g/m<sup>2</sup>  
 W = average vehicle weight (tons) = 5  
 a,b= constants from table 13.2.2-2; a= 0.7; b= 0.45;



p = number of days with at least 0.01 inches of precipitation per year (140).

The maximum miles traveled per year equals 290 miles. Therefore, the particulate matter emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 2.05 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 0.0145 ton/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

Unpaved loadout area:

$$E = (365-p)/365) k(s/12)^a (W/3)^b$$

E = emission factor lbs/VMT

k = particle size multiplier = 4.9

sL = silt loading on road surface = 4.8 g/m<sup>2</sup>

W = average vehicle weight (tons) = 5

a,b = constants from table 13.2.2-2; a= 0.7; b= 0.45;

p = number of days with at least 0.01 inches of precipitation per year (140).

The maximum miles traveled per year equals 850 miles. Therefore, the particulate matter emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 2.00 lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 0.125 ton/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The total PM emissions are therefore equal to 2.6 tons/yr. (the sum of the particulate emissions from paved roadways, unpaved loadout, unpaved parking and unpaved roadways)

g) Miscellaneous Requirements

- (1) None.



**5. F003, F003**

**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
load-in and load-out of storage piles		
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 1.11 tons per year.  No visible emissions except for one minute in any hour.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See b)(2)b, b)(2)c, and b)(2)f.
wind erosion from storage piles		
b.	OAC rule 3745-31-05(A)(3)	No visible emission except for one minute in any hour.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)d, b)(2)e, and b)(2)f.

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:

Coarse Aggregates  
 Recycled brick aggregates  
 Fine Aggregates  
 RAP

- b. The permittee shall employ best 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 permit application, the permittee has committed to minimizing the drop height of the front end loader bucket to ensure compliance. 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 best 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 permittee's permit application, the permittee has committed to minimizing the height of 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 requirements of OAC rule 3745-31-05.



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>
Coarse Aggregates	daily
RAP	daily
Recycled brick aggregates	daily
Fine Aggregates	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>
Coarse Aggregates	daily
RAP	daily
Recycled brick aggregates	daily
Fine Aggregates	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>
Coarse Aggregates	daily
RAP	daily
Recycled brick aggregates	daily
Fine Aggregates	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 may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (7) 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 any control measures besides minimizing drop height or storage pile height;
  - c. the dates that any control measures besides minimizing drop height or storage pile height were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures besides minimizing drop height or storage pile height 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)(7)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) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):
  - a. Emissions limitation: For load-in, load-out and wind erosion from storage piles, No visible emissions except for one minute in any hour.

Applicable compliance method: If required, compliance with the visible emission limitation for the material storage piles areas identified in this permit shall be



determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

- b. Emissions Limitation: PE emissions shall not exceed 0.97 ton per year.

Applicable compliance method: Compliance with the annual emissions limitation shall be determined by the summation of emissions from the load in/load out of the storage piles and the emissions from wind erosion.

Sand/aggregate load-in/load-out emissions are determined based upon the following equation as found in AP-42, Fifth edition, Section 13.2.4(1/95).

$$E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4} \text{ lbs/ton}$$

where:

E = emission factor for aggregate unloading

k = particle size multiplier = 0.74 for PE

U = mean wind speed (mph) = 8.1

M = material moisture content = 8% for all materials

$$E = 0.74(0.0032)(8.1/5)^{1.3}/(8/2)^{1.4} \text{ lbs/ton} = 0.000063623 \text{ lb PE/ton}$$

The total emissions from the load-in/loadout of the storage piles is determined by use of the above emission factor and the annual total process weight rate of 680,000 tons.

Therefore, the total annual emissions from the load in/loadout activities equals 0.216 ton.

Based upon the following equation, which follows from Section 13.2.4.3 of AP-42, the emissions due to wind erosion are calculated as follows:

$$E = 1.7(s/1.5)((365-p)/235)(f/15)(365)(A/2000)$$

where:

E = the emission factor in lbs/day/acre

s = the silt content of the stored materials

p = the number of days w more than 0.1 inch of precipitation

f = the percentage of time the wind speed exceeds 12 mph

A= the totals surface area of the specific storage pile

For each storage pile type, s = 7 (fine aggregate), 10 (RAP), 2 (course aggregate), 2 (recycled brick aggregates), P equals 140 and f equals 9.9. Based upon the surface area of each storage pile type, the contribution to the total particulate emissions from each storage pile type is as follows:

<u>Storage Pile</u>	<u>Acres</u>	<u>Annual Emissions in Tons</u>
Fine Aggregate	0.5	0.46
RAP	0.15	0.196
Coarse aggregates	0.45	0.1176





**6. F004, F004**

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

Over burden removal

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 1.37 tons per year.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See A.2.b through A.2.d).  No visible emission except for three minutes in any hour.  No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		airborne.

(2) Additional Terms and Conditions

- a. The above annual particulate emission limitations were established to reflect the potential to emit for these emissions units. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The mineral extraction operations covered by this permit and subject to the above-mentioned requirements are listed below:

Overburden removal, loading and reclamation.

- c. The permittee shall employ best available control measures for the above-identified mineral extraction operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee shall commit to perform the following control measure(s) to ensure compliance:

<u>mineral extraction operation(s)</u>	<u>control measure(s)</u>
Overburden removal	Precautionary operating practices
Loading	Prevent haul vehicle overloading
Reclamation	Practice as expeditiously as possible

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. For each mineral extraction operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the mineral extraction operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- e. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

c) Operational Restrictions

- (1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for mineral extraction operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>mineral extraction operation(s)</u>	<u>minimum inspection frequency</u>
Overburden removal and loading	Each day mineral extraction operations are employed.

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.
- (3) The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspection would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed;

The information in d)(4)a shall be kept separately for each mineral extraction operation identified above, 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) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):

- a. Emissions limitation: No visible emission except for three minutes in any hour.

Applicable compliance method: If required, compliance with the visible emission limitation for the overburden removal and loading areas identified in this permit shall be determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

- b. Emission limitation: Particulate emissions shall not exceed 1.37 tons per year from overburden removal processes.



Applicable compliance method: Compliance shall be demonstrated by multiplying the proposed maximum annual overburden removal AP 42 table 11.9-4 (7/98) 0.07 lb PE/ton removed and replaced [0.058 topsoil removal + 0.012 replacement overburden] \* 39,000 TPY displaced /2000 = 1.37 tons per year particulate emissions.

Compliance with the emission limit can be demonstrated through a one-time calculation using the maximum throughout (application submitted January 14, 2005) and emission factors found in AP-42.

g) Miscellaneous Requirements

- (1) None.



**7. F005, F005**

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

Crusher

- 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. b)(1)b, b)(2)d, f)(1)c, and g)(1)
- 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>Particulate emissions shall not exceed 0.7 lb/hr and 3.33 tons per year.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p> <p>See b)(2)b and b)(2)c</p> <p>There shall be no visible PE from the crusher, except for a period of time not to exceed 6-minutes during any 60-minute observation period.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO.</p>
b.	40 CFR Part 60, Subpart OOO	Visible emissions of fugitive dust shall not exceed 15% opacity except as provided by rule.



(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures for the above-identified material handling operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure to ensure compliance:

<u>material processing operation</u>	<u>control measure</u>
crusher	water spray

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. For each material handling operation that is not adequately enclosed, the above-identified control measure shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during the operation of the material handling operation until further observation confirms that use of the control measure is unnecessary.
- c. Implementation of the above-mentioned control measure in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- d. Water shall be applied at points necessary to ensure compliance with the visible emission limitations specified above for crushing.
- e. The permittee shall operate the control device (water spray) whenever this emission unit is in operation.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks when crushing equipment is in operation and when weather conditions allow, for any visible particulate emissions from the crushing operation. 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 operation log:
  - a. whether the emissions are representative of normal operations;
  - b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;
  - c. the total duration of any visible emission incident, and



- d. any corrective action taken to eliminate the visible emissions.
- 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) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):
    - a. Emission limitation: Particulate emissions shall not exceed 0.76 lb/hr.  
  
Applicable compliance method: Compliance with the allowable mass emission rate for particulate emissions from the crusher shall be determined by multiplying an emission factor of 0.0054 pounds particulate emissions per ton of aggregate processed by the emission unit's maximum hourly throughput (140 tons). This emission factor is specified in USEPA reference document AP-42, fifth Edition Compilation of Air Pollution Emission Factors Section 11.19.2 table 11.19.2-2 (1/95). 0.0054 (lb/ton emission factor for TSP PE; AP-42 1/95 Table 11.19.2-2) \* 140 tons/hr (1/14/04 application) = 0.76 lb/hr.
    - b. Emission limitation: Particulate emissions shall not exceed 3.33 tons per year.  
  
Applicable compliance method: Compliance with these annual limitations shall be assumed as long as compliance with the hourly limitation is maintained (the annual limitations were calculated by multiplying by 8,760 and then dividing by 2,000).  
  
 $(0.76 \text{ lb of PE/hour} * 8,760 \text{ hours}) / (2,000 \text{ lbs / ton}) = 3.33 \text{ tons per year of PE.}$
    - c. Emission limitation: Visible emissions of fugitive dust shall not exceed 15% opacity.  
  
Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
    - d. Emission limitation: There shall be no visible PE from the crusher, except for a period of time not to exceed 6-minutes during any 60-minute observation period.  
  
Applicable compliance method: If required, compliance with the visible emission limitation for the crusher identified in this permit shall be determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.



g) Miscellaneous Requirements

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

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
F005	Primary Crusher (140 ton/hr)	Subpart OOO

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 the 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. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC- Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and

Central District Office  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, Ohio 43216-1049

- (2) The permittee has committed to performing the required emissions testing during the 2009 production season according to the additional requirements of g)(3) and the following compliance schedule:
  - a. submits a complete Ohio ITT document to Ohio EPA Central District Office and performs visible emissions testing within forty-five (45) days of resumption of operations of this emissions unit.
- (3) The permittee shall conduct, or have conducted, emission testing for the crusher and transfer points in accordance with the following requirements:
  - a. The emission testing shall be conducted to demonstrate compliance with the opacity limitations.



- b. The following test method shall be employed to demonstrate compliance with 40 CFR Part 60 Subpart OOO: 40 CFR Part 60, Appendix A, Method 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- c. 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 Central District Office.

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

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

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



**8. F006, F006**

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

Material Handling for aggregate operations

- 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. b)(1)b, f)(1)b, and g)(1)
- 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>Particulate emissions shall not exceed 2.53 lbs/hr and 11.1 tons per year.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust</p> <p>See b)(2)b, b)(2)c, and b)(2)d.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO</p>
b.	40 CFR Part 60, Subpart OOO	Visible emissions from the these emissions units shall not exceed 10% opacity.

- (2) Additional Terms and Conditions
  - a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:



Transfer Points (56) = 200 tons/hr  
Material Handling = 200 tons/hr  
Screens (3) = 200 tons/hr  
Load in/Load out = 200 tons/hr.

- b. The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
Load in or load out or any combination of loading or conveying	inherent moisture, application of water, where necessary, to control particulate emissions

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- e. The above hourly and annual particulate emission limitations were established to reflect the potential to emit for these emissions units. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:





Front end loader load in PTE =  $(0.001\#PE/ton) * (200\ ton/hr) = 0.2\ lb\ PE/hr$   
 $(8760/2000) = 0.876\ Ton\ per\ year.$

Conveyor transfer points PTE =  $(0.000048\ \#PM-10/ton)(2.1\ \#TSP/\#PM-10)(200\ ton/hr) * (56) = 1.129\ \#PE/hr$   
 $(8760/2000) = 4.94\ Tons\ per\ year.$

Screening PTE =  $0.002\ Lbs\ PE/ton)(200\ TPH)(3\ screens) = 1.2\ Lbs\ PE/hr$   
 $(8760/2000) =$

5.256 Tons per year.

Total PE:  $4.94 + 5.256 + 0.876 = 11.1\ tons/year$

- b. Emission limitation: Visible Emissions of fugitive dust shall not exceed 10% opacity, except as provided by rule.

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

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

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
F006	Material handling, loading, screening and conveying operations	Subpart OOO

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 the 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. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC- Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, Ohio 43216-1049



and

Central District Office  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, Ohio 43216-1049

- (2) The permittee has committed to performing the required emissions testing during the 2009 production season according to the additional requirements of g)(3) and the following compliance schedule:
  - a. submits a complete Ohio ITT document to Ohio EPA Central District Office and performs visible emissions testing within forty-five (45) days of resumption of operations of this emissions unit.
- (3) The permittee shall conduct, or have conducted, emission testing for the crusher and transfer points in accordance with the following requirements:
  - a. The emission testing shall be conducted to demonstrate compliance with the opacity limitations.
  - b. The following test method shall be employed to demonstrate compliance with 40 CFR Part 60 Subpart OOO: 40 CFR Part 60, Appendix A, Method 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - c. 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 Central District Office.

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

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

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



**9. P901, P901**

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

300 TPH drum mix asphalt plant controlled by a baghouse

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. b)(1)b, c)(1), d)(6), e)(1), f)(1)c, f)(1)d, f)(1)e, f)(1)f, f)(1)j, f)(1)k, f)(1)l, f)(1)m, f)(1)n, and g)(1)

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)	Carbon monoxide (CO) emissions shall not exceed 51.0 lbs/hr.  Nitrogen Oxide (NO <sub>x</sub> ) emissions shall not exceed 9.6 lbs/hr.  Sulfur Dioxide (SO <sub>2</sub> ) emissions shall not exceed 1.02 lbs/hr.  Volatile Organic Compound (VOC) emissions shall not exceed 19.2 lbs/hr.  PM <sub>10</sub> from the stack shall not exceed 0.03 gr/dscf.  PE from the stack shall not exceed 0.03 gr/dscf.  Emissions of fugitive PM <sub>10</sub> shall not exceed 1.53 pounds per hour.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Fugitive particulate emissions shall not exceed 3.1 pounds per hour.</p> <p>Visible particulate emissions from the stack shall not exceed 10% opacity, as a 3-minute average.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust</p> <p>See b)(2)a.</p> <p>No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator and vibrating screens.</p> <p>Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator and vibrating screens.) shall be less than or equal to 10% opacity, as a 3-minute average.</p> <p>The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.</p> <p>The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 40 CFR Part 60, Subpart I.</p> <p>See b)(2)a and b)(2)b.</p>
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V)	<p>Particulate emissions (PE) from the stack shall not exceed 1.54 tons per rolling 12-month period.</p> <p>PM<sub>10</sub> emissions from the stack shall not exceed 1.54 tons per rolling 12-month period.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Fugitive PE shall not exceed 0.93 ton per rolling 12-month period.</p> <p>Fugitive PM<sub>10</sub> emissions shall not exceed 0.46 ton per rolling 12-month period.</p> <p>CO emissions shall not exceed 15.3 tons per rolling 12-month period.</p> <p>VOC emissions shall not exceed 5.76 tons per rolling 12-month period.</p> <p>SO<sub>2</sub> emissions shall not exceed 0.31 ton per rolling 12-month period.</p> <p>NO<sub>x</sub> emissions shall not exceed 2.88 tons per rolling 12-month period.</p>
c.	<p>OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E) 40 CFR Part 60, Subpart I</p>	<p>The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>

(2) Additional Terms and Conditions

- a. The permittee shall ensure that the baghouse is operated with sufficient air volume to eliminate visible fugitive emissions from the rotary drum.
- b. The pressure drop across the fabric filter shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation.

c) Operational Restrictions

- (1) The maximum annual asphalt production rate for this emissions unit shall not exceed 180,000 tons per year, based upon a rolling, 12-month summation of the production rates.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit.

- (2) The permittee shall burn only propane in this emissions unit.
- (3) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for VOC, CO, and NO<sub>x</sub>.
- (4) The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.



- (5) The exit of the stack serving this emissions unit shall be a minimum of 36 feet above ground.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than propane, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filter on daily basis.
- (3) 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 (see f)(2)). An alternative form may be used upon approval of the Ohio EPA Central District Office.
- (4) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper servicing this emissions unit. If visible particulate emissions are observed, the permittee shall note the following in the operation log:
  - a. the color of the visible particulate emissions;
  - b. the cause of the visible particulate emissions;
  - c. the total duration of the visible particulate emission incident; and
  - d. corrective actions taken to eliminate the visible particulate emissions.

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

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



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

- (6) The permittee shall maintain monthly records of the following information:
  - a. the asphalt production for each month;
  - b. the rolling, 12-month summation of the asphalt production rate;
  - c. the maximum percentage of RAP used for any mix.
- (7) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 ton per year. OAC Chapter 3745 31 requires permittees to apply for and obtain a new or modified FEPTIO 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 FEPTIO.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. any exceedance of the rolling, 12-month asphalt production rate limitation
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Ohio EPA, Central District Office).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date



identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (3) The permittee shall submit a copy of the Burner Tuning Reporting Form for Asphalt Concrete Plants form to Ohio EPA Central District Office to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA Central District Office by January 31 of each year and shall cover the previous calendar year.

f) Testing Requirements

- (1) The permittee shall demonstrate compliance with the emission limitations in b)(1) of these terms and conditions in accordance with the following method(s):

- a. Emission Limitations: PE shall not exceed 0.03 gr/dscf; VOC emissions shall not exceed 19.2 lbs/hr; CO emissions shall not exceed 51.0 lbs/hr; SO<sub>2</sub> emissions shall not exceed 1.02 lbs/hr; and NO<sub>x</sub> emissions shall not exceed 9.6 lbs/hr

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 during the 2010 production season. If this emissions unit does not operate during the 2010 production season, testing shall be performed during the next production season that the emission unit operates. Following completion of this initial emissions test, additional emissions testing shall be performed every three (3) calendar years. If the emissions unit is shut down for the season during that time, emissions testing shall take place within 60 days of resuming operations.
- ii. The permittee shall establish pollutant baseline levels (concentrations) utilizing a portable monitor pursuant to f)(2)d following the procedures in f)(2). Pollutant baseline levels are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the pollutant baseline levels based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rates for the controlled pollutants. In addition, approved revisions to the pollutant baseline levels will not constitute a relaxation of the emissions limitations or burner tuning requirements of this permit and may be incorporated into this permit by means of a administrative modification.
- iii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PM, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>
- iv. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s) for :

For PM, Methods 1-5 of 40 CFR Part 60, Appendix A.



For NO<sub>x</sub>, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

For SO<sub>2</sub>, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

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

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

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

- v. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

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

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

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

- b. Emissions Limitation: PE from the stack emissions shall not exceed 1.54 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be based upon the results of the most recent emissions testing and the records required by d)(6).

- c. Emission Limitation: VOC emissions shall not exceed 5.76 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be based upon the results of the most recent emissions testing and the records required by d)(6).



- d. Emission Limitation: CO emissions shall not exceed 15.3 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be based upon the results of the most recent emissions testing and the records required by d)(6).

- e. Emission Limitation: SO<sub>2</sub> emissions shall not exceed 0.31 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be based upon the results of the most recent emissions testing and the records required by d)(6).

- f. Emission Limitation: NO<sub>x</sub> emissions shall not exceed 2.88 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be based upon the results of the most recent emissions testing and the records required by d)(6).

- g. Emission Limitation: Visible particulate emissions from the stack shall not exceed 10% opacity as a 3-minute average.

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- h. Emission limitation: No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator and vibrating screens.

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

Applicable compliance method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- j. Emission limitation: PM<sub>10</sub> emissions from the stack shall not exceed 1.54 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month emissions limitation for particulate emissions.



- k. Emission limitation: Fugitive PM<sub>10</sub> emissions shall not exceed 0.46 tons per rolling 12-month period.

Applicable compliance method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

- i. Fugitives emissions from the cold end are calculated as follows

$$((180,000 \text{ tons of material/year} * 0.0024 \text{ lb PM}_{10}/\text{ton of material}) + (108,000 \text{ tons of aggregate/year} * 0.0033 \text{ lb PM}_{10}/\text{ton of aggregate}) + (72,000 \text{ tons of sand/year} * 0.00099 \text{ lb PM-10}/\text{ton of sand}) * (1 \text{ ton}/2000 \text{ pounds}) = 0.43 \text{ tons of PM}_{10}$$

- ii. Fugitives emissions from the hot end are calculated as follows

$$(180,000 \text{ tons of asphalt produced} * 0.0003 \text{ lb of PM}_{10}/\text{ton of asphalt produced}) * (1 \text{ ton}/2000 \text{ pounds}) = 0.027 \text{ tons of PM}_{10}.$$

Total fugitive emissions are therefore 0.46 tons.

The emission factors in the above equations are derived from AP-42, Fifth edition, Table 11.12-2 (10/01) and from AP-42, Fifth edition, 11.1.2.5 (12/00)

- l. Emissions Limitation: Fugitive PM emissions shall not exceed 0.93 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculations:

Total fugitive emissions equal the summation of the fugitives from the cold end and the hot end of the plant operations.

- i. Fugitives emissions from the cold end are calculated as follows

$$((180,000 \text{ tons of material/year} * 0.0051 \text{ lb PM}/\text{ton of material}) + (108,000 \text{ tons of aggregate/year} * 0.0069 \text{ lb PM}/\text{ton of aggregate}) + (72,000 \text{ tons of sand/year} * 0.0021 \text{ lb PM}/\text{ton of sand})) * (1 \text{ ton}/2000 \text{ pounds}) = 0.91 \text{ tons of PM}$$

- ii. Fugitives emissions from the hot end are calculated as follows

$$(180,000 \text{ tons of asphalt produced} * 0.0003 \text{ lb of PM}/\text{ton of asphalt produced}) * (1 \text{ ton}/2000 \text{ pounds}) = 0.027 \text{ tons of PM}.$$

Total fugitive emissions are therefore 0.93 tons.

The emission factors in the above equations are derived from AP-42, Fifth edition, Table 11.12-2 (10/01) and from AP-42, Fifth edition, 11.1.2.5 (12/00)



- m. Emission Limitations: Emissions of fugitive PM<sub>10</sub> shall not exceed 1.53 pounds per hour

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month operational restriction.

- n. Emission Limitations: Emissions of fugitive PM shall not exceed 3.1 pounds per hour.

Applicable Compliance Method: Compliance with this emissions limitation shall be assumed as long as compliance is maintained with the rolling 12-month operational restriction.

(2) Burner Tuning

- a. Introduction

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

- b. Qualifications for Burner Tuning

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

- c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO<sub>x</sub>, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

- d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in f)(1)a. The baselines shall be determined for NO<sub>x</sub> and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacture's recommendations. Record these values on the Burner Tuning Reporting Form



for Asphalt Concrete Plants form (see 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 manufacture's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO<sub>x</sub> and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 110 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to f)(2)d.v.

The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 110 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 110 percent of the pollutant baseline values.

- v. Once all of the measured stack exhaust gas values are within the 110 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 31st 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 Ohio EPA District Office or local air agency responsible for the permitting of the facility.
- e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of each production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after reaching 100,000 tons of asphalt production. 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 reaching 100,000 tons of asphalt during the production seasons.



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.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
P901	300 TPH 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:

Ohio Environmental Protection Agency  
DAPC- Air Quality Modeling and Planning  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and

Central District Office  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, Ohio 43216-1049

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

**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  #2 Fuel Oil  #4 Fuel Oil  Used Oil  Other (describe)

**Tuning Results:**

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

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

<sup>2</sup> Specify whether on a dry or wet basis.

<sup>3</sup> If the burner did not require adjusting, please record N/A in the post tuning column.

Describe in detail a list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturers specifications. Use additional paper if necessary.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0104653

**Facility ID:** 0165010135

**Effective Date:** 7/9/2009

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: