



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

4/25/2012

Garrett Clemons
Ohio Basic Minerals LLC
1700 Broadway, Suite 1170
Denver, CO 80290

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0640010102
Permit Number: P0108933
Permit Type: OAC Chapter 3745-31 Modification
County: Jackson

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Times Journal. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 122 South Front Street Columbus, Ohio 43215	and	Ohio EPA DAPC, Southeast District Office 2195 Front Street Logan, OH 43138
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Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-SEDO; Kentucky; West Virginia

PUBLIC NOTICE

4/25/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

Ohio Basic Minerals LLC
15317 BEAVER PIKE ROAD,
Jackson, OH 45640
Jackson County

FACILITY DESC.: All Other Miscellaneous Nonmetallic Mineral Product Manufacturing

PERMIT #: P0108933

PERMIT TYPE: OAC Chapter 3745-31 Modification

PERMIT DESC: This permit is a Chapter 31 Modification of P0103781 to address 40 CFR Subpart UUU applicability to P901; provide parametric monitoring data for P901, P902, and P903; and increased roadways emissions based on maximum facility throughput.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the permit # or: Steve Alspach, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Ohio Basic Minerals LLC**

Facility ID:	0640010102
Permit Number:	P0108933
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	4/25/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
Ohio Basic Minerals LLC

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Authorization

Facility ID: 0640010102

Application Number(s): A0043027

Permit Number: P0108933

Permit Description: This permit is a Chapter 31 Modification of P0103781 to address 40 CFR Subpart UUU applicability to P901; provide parametric monitoring data for P901, P902, and P903; and increased roadways emissions based on maximum facility throughput.

Permit Type: OAC Chapter 3745-31 Modification

Permit Fee: \$1,200.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 4/25/2012

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Ohio Basic Minerals LLC
15317 BEAVER PIKE ROAD
Jackson, OH 45640

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, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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

Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108933

Permit Description: This permit is a Chapter 31 Modification of P0103781 to address 40 CFR Subpart UUU applicability to P901; provide parametric monitoring data for P901, P902, and P903; and increased roadways emissions based on maximum facility throughput.

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

Emissions Unit ID:

Company Equipment ID: Plant roadways
Superseded Permit Number: P0103781
General Permit Category and Type: Not Applicable

F002

Emissions Unit ID:

Company Equipment ID: Storage Piles
Superseded Permit Number: P0103781
General Permit Category and Type: Not Applicable

F003

Emissions Unit ID:

Company Equipment ID: Fluid Bed Dryer
Superseded Permit Number: P0103781
General Permit Category and Type: Not Applicable

P901

Emissions Unit ID:

Company Equipment ID: Plant Classifying Operations
Superseded Permit Number: P0103781
General Permit Category and Type: Not Applicable

P902

Emissions Unit ID:

Company Equipment ID: Product Loadout
Superseded Permit Number: P0103781
General Permit Category and Type: Not Applicable

P903



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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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, Southeast 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 submitting¹ 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 emissions 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.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart UUU: P901. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office or local air agency.

C. Emissions Unit Terms and Conditions



1. F002, Plant roadways and Parking Areas

Operations, Property and/or Equipment Description:

Unpaved Plant Roadways and Parking Areas - with a total of 12,623 vehicle miles traveled (VMT) per year. (Chapter 31 Modification of P0103781 which was issued Final on 10/27/2008 to Ohio Basic Minerals to increase potential emissions based on increased VMT.)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 1.21 tons per year; There shall be no visible PE except for a period of time not to exceed three minutes during any sixty minute observation period for unpaved roads and parking areas. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a. through b)(2)h. below.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)i. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)(5)	Exempt. See b)(2)j. below.
d.	OAC rule 3745-17-08(B)	Exempt. See b)(2)k. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rule 3745-31-05(A)(3) are listed below:

<u>unpaved roadways and parking areas</u>	<u>inspection frequency</u>
all roads and parking areas	daily

c. 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 application, the permittee has committed to treat the unpaved 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 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 unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- e. 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.
- f. Any unpaved roadway or parking area that is subsequently paved, will require a PTIO for paved roadways and parking areas. 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. 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.
- h. 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.
- i. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install and Operate P0108933 for this air contaminate source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. Fugitive PE shall not exceed 1.21 tons per year
- ii. No visible PE except for a period of time not to exceed three minutes during any sixty minute observation period.
- iii. Watering at sufficient treatment frequencies to ensure compliance.
- j. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- k. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).



c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

unpaved roadways and parking areas inspection frequency

all roads and parking areas daily

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Fugitive PE shall not exceed 1.21 tons per year.

Applicable Compliance Method:

Compliance shall be determined based on the emission factor calculation from AP-42, Chapter 13.2.2 (11/06). Initial compliance has been determined utilizing inputs representing current conditions as follows:

Unpaved Roadways and Parking Areas:

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

Where:

- EF= size-specific emission factor (lb/VMT)
- s= silt content of road surface material (%) = 4.8%
- W= mean vehicle weight (tons) = 21.0952
- a= constant (dimensionless) = 0.7
- b= constant (dimensionless) = 0.45
- k= particle size multiplier (dimensionless) = 4.9
- p= number of rain days per year >0.01 in. = 140

Therefore, EF= 3.83 lbs/VMT

Maximum travel= 12,623 VMT/year

$$(12,623 \text{ VMT/year})(3.83 \text{ lbs/VMT})(1 \text{ ton}/2,000 \text{ lbs}) = 24.15 \text{ TPY uncontrolled}$$

Assume 95% control efficiency for roadway watering
(24.15 TPY)(0.05)= 1.21 TPY controlled PE

b. Emissions Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty minute observation period

Applicable Compliance Method:

If required, compliance shall be determined in accordance with USEPA Method 22.



g) Miscellaneous Requirements

- (1) None.



2. F003, Storage Piles

Operations, Property and/or Equipment Description:

Storage Piles - 3 piles – Consisting of 1.04 acre new sand and gravel pile; 0.43 acre old sand pile; and 0.25 acre gravel pile. Total facility throughput of 377,000 tons per year. (Chapter 31 Modification of P0103781 which was issued Final on 10/27/2008 to Ohio Basic Minerals to increase potential emissions based on increased material handling activities.)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 2.49 tons per year. There shall be no visible PE except for a period of time not to exceed one minute during any sixty minute observation period. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a. through b)(2)f. below.

b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)g. below.
c.	OAC rule 3745-17-07(B)(6)	Exempt. See b)(2)h. below.
d.	OAC rule 3745-17-08(B)	Exempt. See b)(2)i. below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- 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 application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- d. The permittee shall employ 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 application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to



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

- e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this air contaminant source since the uncontrolled potential to emit for PE is less than ten tons per year.

- h. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- i. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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all	daily
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- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

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

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

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

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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



e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Fugitive PE shall not exceed 2.49 tons per year.

Applicable Compliance Method:

Compliance shall be determined based on the emission factor calculation for drop operations associated with storage piles in AP-42 section 13.2.4 (11/06).

Initial compliance has been determined using inputs representing current conditions as follows:

LOAD-IN / LOAD-OUT of Sand & Gravel Pile #1

$$EF = k (0.0032) [(U/5)^{1.3} / (M/2)^{1/4}]$$

Where:

EF= emission factor expressed in pounds per ton (lbs/ton)

k= particle size multiplier for TSP (dimensionless) = 0.74

U= mean wind speed expressed in miles per hour (MPH) = 8.7

M= material moisture content (%) = 3%

Therefore, EF = 0.002758 lb/ton

maximum annual load-in / load-out throughput = 127,000 tons/year (as submitted in PTIO application)

Load-in (0.002758 lb/ton)(127,000 tons/year)(.0005 ton/lb) = 0.175133 ton/yr + Load-out(0.002758 lb/ton)(127,000 tons/year)(.0005 ton/lb) = 0.175133 ton/yr = 0.3502 tons/yr of uncontrolled PE

LOAD-OUT of Sand Pile #2 (Old) *

$$EF = k (0.0032) [(U/5)^{1.3} / (M/2)^{1/4}]$$



Where:

EF= emission factor expressed in pounds per ton (lbs/ton)

k= particle size multiplier for TSP (dimensionless) = 0.74

U= mean wind speed expressed in miles per hour (MPH) = 8.7

M= material moisture content (%) = 3%

Therefore, EF = 0.002758 lb/ton

maximum annual load-in / load-out throughput = 125,000 tons/year (as submitted in PTIO application)

Load-out(0.002758 lb/ton)(125,000 tons/year)(.0005 ton/lb) = 0.1724 ton/yr of uncontrolled PE

*There is no load-in since this is an existing pile that will be depleted.

LOAD-IN / LOAD-OUT of Gravel Pile #3

$$EF = k (0.0032) [(U/5)^{1.3} / (M/2)^{1/4}]$$

Where:

EF= emission factor expressed in pounds per ton (lbs/ton)

k= particle size multiplier for TSP (dimensionless) = 0.74

U= mean wind speed expressed in miles per hour (MPH) = 8.7

M= material moisture content (%) = 3%

Therefore, EF = 0.002758 lb/ton

maximum annual load-in / load-out throughput = 125,000 tons/year (as submitted in PTIO application)

Load-in (0.002758 lb/ton)(125,000 tons/year)(.0005 ton/lb) = 0.172375 ton/yr + Load-out(0.002758 lb/ton)(125,000 tons/year)(.0005 ton/lb) = 0.172375 ton/yr = 0.3447 ton/yr of uncontrolled PE

TOTAL LOAD-IN/LOAD-OUT EMISSIONS = 0.3502 + 0.1724 + 0.3447 = 0.8673 TPY

WIND EROSION – Sand & Gravel Pile #1

The emission factor calculation for wind erosion from storage piles is found in USEPA’s Control of Open Fugitive Dust Sources (9/88). Initial compliance has been determined using inputs representing current conditions as follows:

$$EF = (1.7)(s/1.5)((365-p/235))(f/15)$$

Where:

E= emission factor in pounds (lbs)/day/acre)

s= silt content of material (%) = 3.9%
 p= number of rain days per year >0.01 in. = 140
 f= percentage of time that wind speed exceeds 12 mph (%) = 20%
 A= total surface area of storage piles (acres) = 1.04

Therefore, EF= 5.642553 lbs/day/acre

(5.642553 lbs/day/acre) (365 days/yr) (1.04 acres)(.0005ton lb)= 1.071 TPY uncontrolled PE

WIND EROSION – Sand Pile #2

The emission factor calculation for wind erosion from storage piles is found in USEPA’s Control of Open Fugitive Dust Sources (9/88). Initial compliance has been determined using inputs representing current conditions as follows:

$$EF = (1.7)(s/1.5)((365-p/235))(f/15)$$

Where:

E= emission factor in pounds (lbs)/day/acre
 s= silt content of material (%) = 3.9%
 p= number of rain days per year >0.01 in. = 140
 f= percentage of time that wind speed exceeds 12 mph (%) = 20%
 A= total surface area of storage piles (acres) = 0.43

Therefore, EF= 5.642553 lbs/day/acre

(5.642553 lbs/day/acre) (365 days/yr) (0.43 acres)(.0005ton lb)= 0.4428 TPY uncontrolled PE

WIND EROSION – Gravel Pile #3

The emission factor calculation for wind erosion from storage piles is found in USEPA’s Control of Open Fugitive Dust Sources (9/88). Initial compliance has been determined using inputs representing current conditions as follows:

$$EF = (1.7)(s/1.5)((365-p/235))(f/15)$$

Where:

E= emission factor in pounds (lbs)/day/acre
 s= silt content of material (%) = 1.6%
 p= number of rain days per year >0.01 in. = 140
 f= percentage of time that wind speed exceeds 12 mph (%) = 20%
 A= total surface area of storage piles (acres) = 0.25

Therefore, EF= 2.314894 lbs/day/acre



$(2.314894 \text{ lbs/day/acre}) (365 \text{ days/yr}) (0.25 \text{ acres})(.0005 \text{ ton lb}) = 0.1056 \text{ TPY}$
uncontrolled PE

TOTAL WIND EROSION EMISSIONS = $1.071 + 0.4428 + 0.1056 = \underline{1.6194 \text{ TPY}}$

TOTAL EMISSION SUMMARY

Load-in and load-out = 0.8673 TPY

Wind erosion = 1.6194 TPY

Total Storage Pile PE = 2.49 TPY

b. Emissions Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty minute observation period

Applicable Compliance Method:

If required, compliance shall be determined in accordance with USEPA Method 22.

g) Miscellaneous Requirements

(1) None.



3. P901, Fluid Bed Dryer

Operations, Property and/or Equipment Description:

15 mmBtu/hr, Natural Gas-Fired, Fluid Bed Dryer with a maximum process weight rate of 70 tons per hour, vented to a Wet Scrubber with a design control efficiency of 98%. Two material handling transfer points consisting of load-in to dryer hopper and conveyor to the dryer. (Chapter 31 Modification of P0103781 which was issued Final on 10/27/2008 to Ohio Basic Minerals to increase potential emissions based on increased material processing activities.)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	The gr/dscf particulate emissions (PE) stack limitation specified by this rule is equivalent to the stack limitation established pursuant to 40 CFR Part 60, Subpart UUU. Fugitive Emissions: There shall be no visible fugitive PE from the hopper or conveyor transfer points.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Stack Emissions: Emissions of Nitrogen Oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Emissions of Carbon Monoxide (CO) shall not exceed 1.24 lbs/hr and 5.43 tpy. See b)(2)a. below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-17-07(B)(1)	Exempt. See b)(2)c. below.
e.	OAC rule 3745-17-08(B)	Exempt. See b)(2)d. below.
f.	OAC Rule 3745-17-07(A)(1)(a)	Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.
g.	OAC rule 3745-17-11(B)(3)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to ORC 3704.03(T).
h.	40 CFR Part 60, Subpart UUU (40 CFR 60.730 – 60.737) [In accordance with 40 CFR 60.730 this emissions unit is natural gas-fired, fluid bed sand dryer with a burner rating of 15 mmBtu/hr]	PE shall not exceed 0.025 gr/dscf of exhaust gases. [40 CFR 60.732(a)]

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.



- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to NOx and CO emissions from this air contaminant source since the uncontrolled potential to emit for NOx and CO is less than 10 tons/yr.

- c. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- d. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) The permittee shall comply with the applicable requirements of 40 CFR Part 60 Subpart UUU, including the following sections:

60.732(a)	PE shall not exceed 0.025 gr/dscf of exhaust gases.
60.734(d)	The owner or operator shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber.
60.736(b)(1)	Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

- (2) The permittee shall employ only natural gas in this emissions unit.
- (3) The emissions from this emissions unit shall be vented to a wet scrubber at all times the emissions unit is in operation.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable Monitoring and Record Keeping requirements of 40 CFR Part 60 Subpart UUU, including the following sections:

60.734(d)	The owner or operator of an affected facility who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.
60.735(a)	Records of the measurements required in §60.734 of this subpart shall be retained for at least 2 years.
60.735(b)	Each owner or operator who uses a wet scrubber to comply with §60.732 shall determine and record once each day, from the recordings of the monitoring devices in §60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.

- (2) The permittee shall maintain a record of the date and amount of each time a fuel other than natural gas is used in this emissions unit.
- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber and the scrubber liquid flow rate shall be based upon the manufacturers specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.



e) Reporting Requirements

- (1) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:

60.735(c)(2)	Any daily 2-hour average of the wet scrubber pressure drop determined as described in §60.735(b) that is less than 90 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or
60.735(c)(3)	Each daily wet scrubber liquid flow rate recorded as described in §60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

PE shall not exceed 0.025 gr/dscf of exhaust gases.

Applicable Compliance Method:

PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office. See f)(2).

b. Emissions Limitation:

Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Emissions of NO_x shall not exceed 1.47 lbs/hr and 6.44 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor from AP-42, Table 1.4-1,(7/98) (0.098039 lbNO_x/mmBtu) by the maximum rated capacity of P901 (15 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

Compliance with the annual emission limitation shall be demonstrated by utilizing a one-time worse case calculation. The emission factor from AP-42, Table 1.4-1, (7/98) (0.098039 lbNO_x/mmBtu/hr) multiplied by the maximum rated capacity of P901 and 8,760 hours/year, then divided by 2,000 lbs/ton.

d. Emissions Limitation:

Emissions of CO shall not exceed 1.24 lbs/hr and 5.43 tpy.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor from AP-42, Table 1.4-1,(7/98) (0.082353 lb CO/mmBtu) by the maximum rated capacity of P901 (15 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

Compliance with the annual emission limitation shall be demonstrated by utilizing a one-time worse case calculation. The emission factor from AP-42, Table 1.4-1, (7/98) (0.082353 lb CO/mmBtu/hr) multiplied by the maximum rated capacity of P901 and 8,760 hours/year, then divided by 2,000 lbs/ton.

e. Emissions Limitation:

There shall be no visible fugitive PE from the hoppers or conveyor transfer points.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

(2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

- a. The emission testing shall be conducted within 180 days of final issuance of this permit.
- b. In accordance with 60.736(a), and 60.8, initial testing shall be completed in accordance with the requirements found in 40 CFR 60.732.
- c. The emission testing shall be conducted to demonstrate compliance with the allowable stack PE limitation.
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s):

Compliance with the stack PE limitation specified by 40 CFR Part 60, Subpart UUU shall be determined in accordance with Test Methods 1 – 5 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”) with the exceptions specified in 60.257(a)(1)(i).

- e. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- f. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility’s ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- h. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.



4. P902, Plant Classifying and Storage Equipment

Operations, Property and/or Equipment Description:

Plant Classifying and Storage Equipment consisting of Total building enclosure of the Screen Tower which includes a scalper screen, 3 product screens and 6 magnetic separators with a main feed conveyor. A 6/10 mesh silo, 10/20 mesh silo, 40/70 mesh silo, 70/100 mesh silo, and a -100 mesh silo. All emissions are controlled by a fabric filter baghouse #1 with a design control efficiency of 98%. (Chapter 31 Modification of P0103781 which was issued Final on 10/27/2008 to Ohio Basic Minerals to increase potential emissions based on increased material processing activities .)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Particulate emissions (PE) from the baghouse shall not exceed 0.022 gr/dscf of exhaust gases. There shall be no visible fugitive PE escape from the screening building egress points.
b.	OAC rule 3745-17-07(B)(1)	Exempt. See b)(2)a. below.
c.	OAC rule 3745-17-08(B)	Exempt. See b)(2)b. below.



d.	OAC Rule 3745-17-07(A)(1)(a)	Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.
e.	OAC rule 3745-17-11(B)(3)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to ORC 3704.03(T).

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- b. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emissions incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

PE from the baghouse shall not exceed 0.022 gr/dscf of exhaust gases.

Applicable Compliance Method:

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office. See f)(2).



b. Emissions Limitation:

Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

There shall be no visible fugitive PE escape from the screening building egress points.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

g) Miscellaneous Requirements

(1) None.



5. P903, Product Loadout

Operations, Property and/or Equipment Description:

Product Loadout Equipment consisting of Bulk Truck Load-out, Sand Bagger, Bulk Rail Load-out, and Bulk Bagger Machine. All emissions are controlled by a fabric filter baghouse #2 with a design control efficiency of 98%. (Chapter 31 Modification of P0103781 which was issued Final on 10/27/2008 to Ohio Basic Minerals to increase potential emissions based on increased material processing activities.)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Particulate emissions (PE) from the baghouse shall not exceed 0.022 gr/dscf of exhaust gases. There shall be no visible fugitive PE.
b.	OAC rule 3745-17-07(B)(1)	Exempt. See b)(2)a. below.
c.	OAC rule 3745-17-08(B)	Exempt. See b)(2)b. below.



d.	OAC Rule 3745-17-07(A)(1)(a)	Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.
e.	OAC rule 3745-17-11(B)(3)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to ORC 3704.03(T).

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- b. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emissions incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

PE from the baghouse shall not exceed 0.022 gr/dscf of exhaust gases.

Applicable Compliance Method:

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office. See f)(2).

- b. Emissions Limitation:

Visible PE from the exhaust stack shall not exceed twenty per cent opacity, as a six-minute average.



Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

There shall be no visible fugitive PE escape from the screening building egress points.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

g) Miscellaneous Requirements

(1) None.