



Environmental Protection Agency

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

3/23/2011

Mr. Anthony Ruggiero
S&S Aggregate, Enterprise site
P.O. Box 1585
Zanesville, OH 43702

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

Facility ID: 0637015006
Permit Number: P0106594
Permit Type: Initial Installation
County: Hocking

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
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)

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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
S&S Aggregate, Enterprise site**

Facility ID:	0637015006
Permit Number:	P0106594
Permit Type:	Initial Installation
Issued:	3/23/2011
Effective:	3/23/2011
Expiration:	3/23/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
S&S Aggregate, Enterprise site

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Authorization

Facility ID: 0637015006
Application Number(s): A0039900
Permit Number: P0106594
Permit Description: 300 TPH Sand and Gravel Aggregate Plant with mineral extraction. This is a wet mining process.
Permit Type: Initial Installation
Permit Fee: \$2,200.00
Issue Date: 3/23/2011
Effective Date: 3/23/2011
Expiration Date: 3/23/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

S&S Aggregate, Enterprise site
29489 Chieftain Dr.
Logan, OH 43138

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

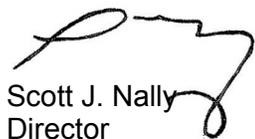
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0106594
Permit Description: 300 TPH Sand and Gravel Aggregate Plant with mineral extraction. This is a wet mining process.

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

- Emissions Unit ID: F001**
Company Equipment ID: Roads
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID: F002**
Company Equipment ID: storage piles
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID: F003**
Company Equipment ID: Sand & Gravel Processing
Superseded Permit Number:
General Permit Category and Type: Not Applicable
- Emissions Unit ID: F004**
Company Equipment ID: Mineral Extraction
Superseded Permit Number:
General Permit Category and Type: Not Applicable

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.

¹ Permittees 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 units contained in this permit are subject to 40 CFR Part 60, Subpart OOO, F003. 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. F001, Roads

Operations, Property and/or Equipment Description:

Unpaved roadways and parking areas – maximum of 12,150 vehicle miles traveled annually.

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3), as effective 11/30/01. Row b: OAC rule 3745-31-05(E) as effective 12/01/06.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions 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 revision to OAC rule 3745-31-05, the requirement 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 OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. The permittee shall employ best available control measures on all paved and/or unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved and/or unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies, as well as speed reduction, to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved and/or 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.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 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 best available technology requirements of OAC rule 3745-31-05.
- 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.

Permit to Install and operate P0106594 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3):

- i. Fugitive PE shall not exceed 1.45 TPY.
 - ii. The use of water, chemical stabilization and surface improvement as needed to achieve 95% control.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>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 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 monthly 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 kept for:

- i. the unpaved roadways and parking area; and

- ii. 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) Emissions Limitation:

No visible PE except for three minutes during any 60 minute period.

Applicable Compliance Method:

If required, visible emissions of fugitive dust shall be determined according to USEPA Method 22, with the modifications found in OAC rule 3745-17-03(B)(4).

- (2) Emissions Limitation:

Fugitive PE shall not exceed 1.45 tons per year year from unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance shall be determined based on the emission factor calculation for unpaved roadways and parking areas in AP-42 section 13.2.2 (11/06). Initial compliance has been determined utilizing inputs representing current conditions as follows:

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

Where:

s = surface material silt content = 4.8 %

W = average vehicle weight (tons) = 31.5 haul trucks average vehicle weight

p = days per year with >0.01 inches of precipitation (131)

Therefore, EF = 4.77 lb/VMT

Maximum travel = medium duty diesel – 4,000 miles/year

heavy duty diesel – 8,000 miles/year

light duty gas- 150 miles/year

(12,150 VMT/year)(4.77 lb/VMT)(1ton/2,000 lbs) = 28.95 TPY uncontrolled PE



Assume 95% control efficiency for roadway watering (engineering estimate of permittee)

$(28.95 \text{ TPY}) (0.05) = 1.45 \text{ TPY fugitive PE}$

g) Miscellaneous Requirements

- (1) None.



2. F002, storage piles

Operations, Property and/or Equipment Description:

Eighteen sand and gravel storage piles with a maximum annual throughput of 200,000 tons and total surface area of 6 acres.

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.	There shall be no visible particulate emissions (PE) except for one minute during any 60-minute period. Fugitive PE shall not exceed 0.50 tons per year. Best Available Control Measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a and b)(2)c through b)(2)i.
b.	OAC rule 3745-31-05(E), as effective 12/01/06.	b)(2)b.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions 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 revision to OAC rule 3745-31-05, the requirement 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 OAC rule 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.

Permit to Install and operate P0106594 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3):

- i. Fugitive PE shall not exceed 1.45 TPY.
- ii. The use of water, chemical stabilization and surface improvement as needed to achieve 95% control.
- c. The permittee shall employ best available control measures on all 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 to treat with chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.
- d. 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.
- e. 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.
- f. 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.

- g. 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.
- h. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit are 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>
all	daily

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

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

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

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

- (4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not

performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
- (6) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a monthly 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 measure(s).

The information required in d)(6)d. shall be kept separately for:

- i. the storage pile load-in operations,
- ii. the storage pile load-out operations,
- iii. the storage pile surfaces (wind erosion), and

shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) **Reporting Requirements**

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

f) **Testing Requirements**

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
- a. Emissions Limitation:
Fugitive PE shall not exceed 0.50 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 (08/04) and wind erosion from storage piles in USEPA's Control of Open Fugitive Dust Sources (09/88). Initial compliance has been determined using inputs representing current conditions as follows:

Load-in and Load-out

$$E = k (0.0032)[(U/5)^{1.3}/(M/2)^{1.4}]$$

Where:

E = emission factor expressed in pounds (lbs) / ton

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

U = mean wind speed expressed in miles per hour (MPH) = 8.9

maximum annual load-in throughput = 2,628,000 tons/year

maximum annual load-out throughput= 2,628,000 tons/year

[5,256,000 tons/yr)(0.0012362 lb PE/ton)/2,000= 3.25TPY uncontrolled PE

Assume 95% control efficiency for watering (estimate provided by applicant)

$$(3.25TPY)(0.05) = 0.16 TPY$$

Wind Erosion

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

Where:

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

s = silt content of road surface material (%) = 2.6%

p = number of rain days per year > 0.01 in =131

f = percentage of time wind speed exceeds 12 mph (%) = 30

A = total surface area of storage piles (acres) = 6.0

Therefore, E = 4.34 lbs/day/acre

$$(4.34 \text{ lbs/day/acre})(365 \text{ days/yr})(6.0 \text{ acres})/2,000 \text{ lbs/ton} = 4.75 \text{ TPY uncontrolled PE}$$

Assume 95% control for watering (estimate provided by applicant)

$(4.75 \text{ tons/year})(0.05) = 0.24 \text{ TPY controlled PE}$

Total Emissions

$0.18\text{TPY} + 0.32\text{TPY} = 0.50 \text{ TPY PE}$

b. Emission Limitation:

There shall be no visible PE except for one minute during any 60 minute period.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



3. F003, Sand & Gravel Processing

Operations, Property and/or Equipment Description:

Fixed sand and gravel plant with a capacity of 300 TPH wet aggregate processing, including material handling, (2) crushing units, (2) screening units, (23) conveyors, and (4) Wet Sand Screws.

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	The emission limitations for crushers specified by this rule are equivalent to the emissions limitation established in 40 CFR, Part 60, Subpart OOO. Visible particulate emissions (PE) shall not exceed zero percent opacity, as a 6-minute average for screening operations, transfer points, and conveyors . See b)(2)a.
b.	40 CFR Part 60, Subpart OOO (40 CFR 60.670-676) See table 3. [In accordance with 40 CFR 60.670(a)(1)-(c)(2), this facility is a fixed nonmetallic mineral processing plant with a capacity	No owner or operator shall cause to be discharged into the atmosphere from any crusher or any other affected facility any fugitive emissions which exhibit greater than 12 percent opacity. The emission limitation for affected screening operations, transfer points, and



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	above 25 TPY.]	conveyors, specified by this rule are less stringent than BAT.
c.	40 CFR Part 60.1-19 [40 CFR Part 670-676, Table 1]	Table 1 to Subpart OOO of 40 CFR Part 60- Exceptions to Applicability of Subpart A to Subpart OOO shows which of the General Provisions in 40 CFR 60.1-19 are altered.

(2) Additional Terms and Conditions

- a. In accordance with 40 CFR, Part 60 Subpart OOO, the following pieces of equipment are affected facilities constructed, modified, or reconstructed after April 22, 2008:
 - i. 300 TPH Stedman 42" Cage Mill, CR1 Crusher.
 - ii. 300 TPH Canica Model 95 VSI, CR2 Crusher.
 - iii. Plant Conveyor with a width of 2.0 ft, C9.
 - iv. Plant Conveyor with a width of 2.0 ft, C5.
 - v. Plant Conveyor with a width of 2.0 ft, C17.
- b. The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart OOO, including the following:

60.672(e)	Future enclosure of transfer points or affected facilities.
60.672(d)	Exemption for certain truck dumping operations.

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	Daily



- (2) 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 it was necessary to implement the control measure(s);
c. the dates the control measure(s) was (were) implemented; and
d. on a monthly basis, the total number of days the control measure(s) was (were) implemented.

The information in (d) shall be kept separately for each aggregate processing operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart OOO, including the following:

Table with 2 columns: Regulation ID and Description. Rows include 60.674(b) and 60.676(b).

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.
(2) The permittee shall submit notifications and reports to the appropriate Ohio EPA District office as required pursuant to 40 CFR Part 60, Subpart OOO, per the following sections:

Table with 2 columns: Regulation ID and Description. Rows include 60.676(a), 60.676(f), 60.676(g), and 60.676(i).

60.676(k)	Submittal of Reports
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f) Testing Requirements

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

a. Emission Limitation:

No owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 12 percent opacity.

Applicable Compliance Method:

Compliance shall be demonstrated using Method 9 of 40 CFR Part 60, Appendix A-4 and the procedures specified in 40 CFR Subpart OOO, section 60.675. See f)(2).

b. Emission Limitation:

Visible PE shall not exceed zero percent opacity, as a 6-minute average for screening operations, transfer points, and conveyors .

Applicable Compliance Method:

Compliance shall be demonstrated using Method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR Part 60, Subpart OOO, section 60.675. See f)(2).

(2) The permittee shall conduct, or have conducted, visible emissions testing for all fugitive emissions points of emissions unit F003, that are subject to 40 CFR Part 60, Subpart OOO.

a. Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, section 60.8 and 40 CFR Part 60, Subpart OOO, section 60.675. In accordance with 60.675(c) the facility shall use Method 9 of Appendix A to determine compliance with the fugitive emissions standard for any affected facility described under 60.672(b). The duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Approved alternatives to the reference method can be found in 60.675(e)(1) and (2), 60.675(g), and 60.675(i).

b. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, by not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.

- c. The following test methods shall be employed to demonstrate compliance with the allowable visible emissions rates:

Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.

- d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate District Office (DO) or Local Air Agency (LAA).

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate DO or LAA. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate DO or LAA.

- f. Personnel from the appropriate DO or LAA shall be permitted to witness the test, 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.

- g. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate DO or LAA within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate DO or LAA.

g) **Miscellaneous Requirements**

- (1) None.



4. F004, Mineral Extraction

Operations, Property and/or Equipment Description:

Sand and gravel wet mineral extraction process utilizing a dredge, and/or dragline for overburden removal (26,280TPY) overburden loading (26,280TPY), mineral loading (2,628,000TPY) and bulldozing operations (8,760TPY) will be used in the mineral extraction process.

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), as effective 11/30/01.	Fugitive particulate emissions (PE) shall not exceed 4.24 tons per year. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a.,and b)(2)c.,through b)(2)f. below.
b.	OAC rule 3745-31-05(E), as effective 12/01/06.	See b)(2)b. 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. 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.

Permit to Install and operate P0106594 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3):

- i. Fugitive PE shall not exceed 4.24 TPY.
- ii. The use of wet suppression as needed to achieve a 90% control efficiency.
- iii. The use of the following control measures to minimize emissions of fugitive PE:

Mineral Extraction Operation	Control Measure(s) *
overburden removal	minimize area of disturbed land surface; reclaim land surface as expeditiously as possible; maintenance of inherent moisture content with water truck
overburden loading	prevent haul vehicle overloading, maintain low drop height from front end loader bucket
mineral loading	prevent haul vehicle overloading, maintain low drop height from front end loader bucket
bulldozing	reclamation/vegetation practices; water application as necessary

*If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall apply water to the area before conducting operations. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. The permittee shall employ best available control measures for the above-identified mineral extraction operations for the purpose of ensuring compliance with the applicable requirements. The permittee shall conduct an inspection during each day of operations in order to determine if the following control measures are necessary to ensure compliance with the above-mentioned applicable requirements:

Mineral Extraction Operation	Control Measure(s) *
overburden removal	minimize area of disturbed land surface; reclaim land surface as expeditiously as possible; maintenance of inherent moisture content with water truck
overburden loading	prevent haul vehicle overloading, maintain low drop height from front end loader bucket
mineral loading	prevent haul vehicle overloading, maintain low drop height from front end loader bucket
bulldozing	reclamation/vegetation practices; water application as necessary

* If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall apply water to the area before conducting operations. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal, overburden loading, mineral loading, and bulldozing.
- e. For each mineral extraction operation, 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 measures(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures(s) shall continue during the mineral extraction operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

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 during representative, normal operating conditions in accordance with the following minimum frequencies:

Mineral Extraction Operation	Minimum Inspection Frequency
overburden removal	once per day of operation
overburden loading	once per day of operation
mineral loading	once per day of operation
bulldozing	once per day of operation

- (2) 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 it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar monthly basis, the total number of days the control measure(s) was (were) implemented.

The information in (d) 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) Compliance with the emissions limitations specified in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

Emissions Limitation:

Fugitive PE shall not exceed 4.24 tons per year.

Applicable Compliance Method:

The annual fugitive particulate emission limitations were developed by applying the following emission factors/equations and control efficiencies to the associated process weight rates:

Mineral extraction operation	Maximum process weight	Emission Factor formula used to calculate PE	PE (TPY)	Emission Factor citation
Overburden removal	26,280 TPY	$26,280\text{tpy} (0.004)(1/2,000)=$	0.0525	RACM Table 2.1.4-3 (9/88)
overburden loading	26,280 TPY	$0.74(0.0032)[(8.7/5)^{1.3}/(4/2)^{1.4}] (26,280\text{ tpy})(1/2,000)=$	0.021	AP-42 13.2.4.3(11/06)
mineral /stone loading	2,628,000 TPY	$0.74(0.0032)[(8.7/5)^{1.3}/(7.4/2)^{1.4}] (2,628,000\text{ tpy})(1/2,000)=$	1.19	AP-42 13.2.4.3(11/06)
bulldozing	8,760TPH	$5.7(6.8)^{1.2} / (4.0)^{1.3} (8760)(1/2,000) =$	41.09	AP-42 11.9-1(10/98)
Uncontrolled PE			42.35	
Controlled		42.35(10% uncontrolled)=	4.24	

Provided compliance is shown with this permit and the requirement to apply best available control measures, compliance with the annual emission limitations shall be assumed.

- (2) Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal, overburden loading, mineral loading, and bulldozing.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9, with the modifications found in OAC rule 3745-17-03(B)(3)(a) and (b).

g) Miscellaneous Requirements

- (1) None.