



**Environmental
Protection Agency**

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

3/8/2012

Beth Mowrey
Shelly Materials Plant No 62
PO Box 266
Thornville, OH 43076

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0123000206
Permit Number: P0082382
Permit Type: Renewal
County: Fairfield

Certified Mail

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

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, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb 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-CDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Shelly Materials Plant No 62**

Facility ID:	0123000206
Permit Number:	P0082382
Permit Type:	Renewal
Issued:	3/8/2012
Effective:	3/8/2012
Expiration:	3/8/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
Shelly Materials Plant No 62

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. F001, Roadways and Parking Areas 11
2. F002, Storage Piles..... 15
3. F003, Aggregate Processing 19
4. F005, Roadways and Parking Areas 28
5. F006, Storage Piles..... 33

Authorization

Facility ID: 0123000206
Application Number(s): A0012677, A0012679, A0012672, A0012673, A0012675, A0012668, A0012670,
A0012678, A0012676, A0012669, A0012674, A0012671
Permit Number: P0082382
Permit Description: PTIO Renewal for F001-F006
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 3/8/2012
Effective Date: 3/8/2012
Expiration Date: 3/8/2022
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Shelly Materials Plant No 62
3232 Lancaster Logan Rd. SE
Lancaster, OH 43130

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

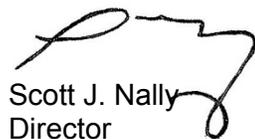
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0082382
Permit Description: PTIO Renewal for F001-F006

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

Emissions Unit ID:	F001
Company Equipment ID:	Roadways and Parking Areas
Superseded Permit Number:	01-3422
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Storage Piles
Superseded Permit Number:	01-3422
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F003
Company Equipment ID:	Aggregate Processing
Superseded Permit Number:	01-3422
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F005
Company Equipment ID:	Roadways and Parking Areas
Superseded Permit Number:	01-08848
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F006
Company Equipment ID:	Storage Piles
Superseded Permit Number:	01-08848
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, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by 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.

C. Emissions Unit Terms and Conditions



1. F001, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Roadways and Parking areas for Aggregate Plant

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) (PTI 01-3422)	No visible PE from any paved roadway except for one minute during any 60-minute period. No visible PE from any unpaved roadway except for three minutes during any 60-minute 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.)
b.	OAC rule 3745-17-07 (B)	See Section A.2.g below.
c.	OAC rule 3745-17-08 (B)	See Section A.2.h below.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the

above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The 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 paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
 - 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 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 emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
 - h. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 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>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
-----------------------------------------	-------------------------------------

all roads and parking areas	daily
-----------------------------	-------

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
-------------------------------------------	-------------------------------------

all roads and parking areas	daily
-----------------------------	-------

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

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

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

The information required in d)(3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

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

f) Testing Requirements

(1) 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. Emission Limitation: No visible PE from any unpaved roadway except for three minutes during any 60-minute period. No visible PE from any paved roadway except for one minute during any 60-minute period.

Applicable Compliance Method: If required, compliance with the visible PE limitations listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.



2. F002, Storage Piles

Operations, Property and/or Equipment Description:

Storage Piles for Aggregate Plant

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) (PTI 01-3422)	No visible PE except for one minute during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b)(2)a. through b)(2)e.)
b.	OAC rule 3745-17-07 (B)	See Section A.2.f below.
c.	OAC rule 3745-17-08 (B)	See Section A.2.g below.

(2) Additional Terms and Conditions

a. 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 maintain material with sufficient moisture content to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ 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: (maintaining low storage pile height) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- e. 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).
- f. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- g. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

all	daily
-----	-------

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

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

all	daily
-----	-------

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

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

all	daily
-----	-------

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

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

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

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

The information required in d)(6)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be

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

e) Reporting Requirements

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

f) Testing Requirements

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

a. Emission Limitation:

There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

- (1) None.



3. F003, Aggregate Processing

Operations, Property and/or Equipment Description:

Aggregate Processing

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) (PTI 01-3422)	See b)(2)a through b)(2)c.
b.	OAC rule 3745-17-07(B)	See b)(2)d.
c.	OAC rule 3745-17-08(B)	See b)(2)e.
d.	40 CFR, Part 60, Subpart OOO (40 CFR 60.670-60.676) [In accordance with 40 CFR 60.670(a), this emissions unit is comprised of crushers, screening operations, conveyors, and storage bins that are affected facilities subject to the emission limitations and requirements specified in this section.]	Visible emission restrictions See b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee shall employ the following control measures for this emissions unit for purposes of ensuring compliance with the above-mentioned applicable requirements:

Material Handling/Processing Operation	Control Measures
loading and unloading	reduced drop height, wet application, as necessary*
crushing and screening	wet application, as necessary*, or total enclosures
transfer and conveying	partial and/or total enclosures, wet application, as necessary*

*If at any time the moisture content of the material processed or handled is not sufficient to meet the above applicable requirements, the permittee shall employ a wet suppression control system to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. For each material handling operation that is not adequately enclosed, the above-identified control measures 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 are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- c. The BAT requirements under OAC rule 3745-31-05(A)(3) have been determined to be compliance with the requirements contained in b(1) a.
- d. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- f. The permittee shall not cause to be discharged into the atmosphere, fugitive dust emissions which exhibit greater than the following:



Material Handling/Processing Operation	Opacity limit [±]
truck unloading to feeder	20%, as a 3-minute average
wet screening and screening of saturated materials	no visible emissions
conveyor transfer points of saturated materials	no visible emissions
transfer points on belt conveyors or any other affected facility in a building	7%, as a 6-minute average
For affected facilities(as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008:	
Crushing/with no capture system	15%, as a 6-minute average
conveyor transfer points feeding and exiting crushers	15%, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	10%, as a 6-minute average
For affected facilities(as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008:	
crushers with no capture system	12 %, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	7%, as a 6-minute average

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material processed through the primary feeder of this emissions unit in (a) tons per month and (b) total tons, to date, for the calendar year.

- (2) Except as otherwise provided in this section, for aggregate processing operations that are not adequately enclosed, the permittee shall perform visible emission inspections of such operations during representative, normal operating conditions in accordance with the following minimum frequencies:

Aggregate Processing Operation	Minimum Inspection Frequency
each loading operation (truck dumping into a feeder, hopper, or crusher)	once per day of operation
each plant conveyor & transfer point	once per day of operation
each screen	once per day of operation
each crusher	once per day of operation

- (3) The permittee shall maintain daily 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 quarter 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.

- (4) When using a wet suppression system to control fugitive dust, the permittee shall perform monthly periodic inspections for each piece of equipment constructed, modified, or reconstructed on or after April 22, 2008, to check that water is flowing to the discharge spray nozzles. The permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if water is not flowing properly during an inspection of the water spray nozzles. The permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under d)(6).
- (5) If the permittee, meeting the requirements of d(4) above, ceases operation of the water sprays or is using a control mechanism other than water sprays to reduce fugitive dust emissions during the monthly inspection (for example, water from recent rainfall), the logbook entry required under d)(6) must specify the control mechanism being used instead of the water sprays.

- (6) The permittee must record each periodic inspection required under d)(4) and d)(5), including dates and any corrective actions taken, in a logbook (in written or electronic format). The permittee must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Ohio EPA upon request.
- 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.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in term numbers d)(1), (2) and (3) above:
- a. the total mineral throughput (i.e. the amount of stone loaded into the primary feeder), in tons, for the previous calendar year.
 - b. each day during which an inspection was not performed by the required frequency; and
 - c. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- (3) The permittee shall submit the following information for each piece of equipment that is replaced by a piece of equipment having the same function as the existing facility:
- a. for a crusher:
 - i. the rated capacity in tons per hour of the existing facility being replaced; and
 - ii. the rated capacity in tons per hour of the replacement equipment.
 - b. for a screening operation:
 - i. the total surface area of the top screen of the existing screening operation being replaced; and
 - ii. the total surface area of the top screen of the replacement screening operation.
 - c. for a conveyor belt:
 - i. the width of the existing belt being replaced; and
 - ii. the width of the replacement conveyor belt.

- d. for a storage bin;
 - i. the rated capacity in tons of the existing storage bin being replaced; and
 - ii. the rated capacity in tons of the replacement storage bins.
- (4) The notification shall be submitted to the appropriate District Office (DO) or Local Air Agency (LAA) within 30 days after the equipment replacement pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for this emissions unit:
 - a. actual start-up date (within 15 days after such date); and
 - b. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to appropriate DO or LAA.:

The addresses for these offices are located at the following web page:

<http://www.epa.ohio.gov/dapc/general/dolaa.aspx>.

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:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average for loading operations (truck dumping into a feeder, hopper, or crusher) in "Appendix A" areas.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, Appendix A (Standards of Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
 - b. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher, at which a capture system is not used; any visible emissions of fugitive dust which exhibit greater than 15% opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.

c. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher constructed, modified, or reconstructed on or after April 22, 2008, any visible emissions of fugitive dust which exhibit greater than 12 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.

d. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any of the following operations: transfer points, screens, grinding mills, bucket elevators, enclosed truck or railcar unloading, storage bins, and bagging operations, any visible emissions of fugitive dust which exhibit greater than 10% opacity, as a six minute average (unless otherwise specified).

Applicable Compliance Method:

If required, 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.

e. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations that were constructed, modified, or reconstructed on or after April 22, 2008, and any transfer point or other affected facility enclosed in a building, any visible emissions of fugitive dust which exhibit greater than 7 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.

f. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere any visible emissions of fugitive dust from wet screening operations and subsequent transfer points that process saturated materials.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Method 22 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR Part 60, Subpart OOO, section 60.675.

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

Visible emissions testing is not required for wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process “saturated material” in the production line, as defined in 60.671, up to, but not including the first crusher, grinding mill or storage bin. The permittee shall notify the appropriate district office or local air agency within 30 days following any change to the operations that causes the aggregate material to no longer meet this definition and the screening operations, bucket elevators, and belt conveyors shall become subject to the opacity standard in 40 CFR 60.672(b) and subsequent opacity testing.

- (3) 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.
- (4) 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.
- (5) The following test methods shall be employed to demonstrate compliance with the allowable visible emissions rates:
- a. Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.
- (6) 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).
- (7) 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.
- (8) 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.



- a. 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. F005, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Plant 62 roadways and parkways

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) (PTI 01-08848)	Particulate emissions shall not exceed 14.77 tons per year. No visible PE from any paved roadway except for one minute during any 60-minute period. No visible PE from any unpaved roadway except for three minutes during any 60-minute 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.)
b.	OAC rule 3745-17-07 (B)	See Section A.2.g below.
c.	OAC rule 3745-17-08 (B)	See Section A.2.h below.

- (2) Additional Terms and Conditions
- a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
 - b. The 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 paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
 - 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 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 emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
 - h. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
 - i.

- 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>paved roadways and parking areas</u> | <u>minimum inspection frequency</u> |
| all roads and parking areas | daily |
| <u>unpaved roadways and parking areas</u> | <u>minimum inspection frequency</u> |
| all roads and parking areas | daily |
- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- (3) The permittee shall maintain records of the following information:
- 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;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - 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.
- (4) The information required in d)(3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The

permittees 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 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: PE emissions shall not exceed 14.77 tons per year.

Applicable Compliance Method: Compliance with the annual emissions limitation shall be determined by the summation of particulate emissions from the paved roadways and unpaved roadways. The particulate emissions from the paved roadways are determined by using equation 1 found in Chapter 13.2.1.3(12/2003) of AP-42:

Paved roadways

$$E = k(s/2)^{0.65} (W/3)^{1.5} (1-P/4N) - C$$

where

E = emission factor lbs/VMT

k = particle size multiplier = 0.082

sL = silt loading on road surface = 8.2 g/m²

W = average vehicle weight (tons) = 31.25

P = number of days with at least 0.01 inches of precipitation per year

C = Emission factor for 1980s vehicle fleet exhaust and tire wear

$$E = 6.9 \text{ lbs PM/VMT}$$

The maximum miles traveled per year equals 56,595 miles. Therefore, the particulate matter emissions from paved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 6.9lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 8.98 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The particulate emissions from the unpaved roadways are determined by using equation 2 found in Chapter 13.2.2.2(10/2001) of AP-42:

Unpaved roadways

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

E = emission factor lbs/VMT

k = particle size multiplier = 4.9.
sL = silt loading on road surface = 9.15 g/m²
W = average vehicle weight (tons) = 31.25
a and b = constants from table 13.2.2-2; a= 0.7; b= 0.45;
p = number of days with at least 0.01 inches of precipitation per year

The maximum miles traveled per year equals 32,340 miles. Therefore, the particulate matter emissions from unpaved roadways are obtained by multiplying the total vehicle miles traveled per year with the derived emission factor of 7.17lbs/VMT and dividing by 2,000 pounds per ton. The resulting uncontrolled emissions rate is then multiplied by a fugitive dust control factor of 95% (1-.95), resulting in a controlled emissions rate of 5.79 tons/yr. The 95% fugitive dust control factor is based upon the RACM document and the fugitive dust control measures identified in the application.

The total PM emissions are therefore equal to 14.77 tons / yr. (the sum of the particulate emissions from paved roadways and unpaved roadways)

- b. Emission Limitation: No visible PE from any unpaved roadway except for three minutes during any 60-minute period. No visible PE from any paved roadway except for one minute during any 60-minute period.

Applicable Compliance Method: If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- g) Miscellaneous Requirements
(1) None.



5. F006, Storage Piles

Operations, Property and/or Equipment Description:

Plant 62 storage piles

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) (PTI 01-08848)	Particulate emissions shall not exceed 3.91 tons per year. No visible PE except for one minute during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b)(2)a. through b)(2)e.)
b.	OAC rule 3745-17-07 (B)	See Section A.2.f below.
c.	OAC rule 3745-17-08 (B)	See Section A.2.g below.

(2) Additional Terms and Conditions

a. 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.

- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ 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: maintaining low storage pile height to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- e. 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).
- f. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- g. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

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

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

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

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

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

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

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

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

where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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

e) Reporting Requirements

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

f) Testing Requirements

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

- a. Emission Limitation: There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method: Compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- b. Emissions Limitation: PE emissions shall not exceed 3.91 tons per year.

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

Sand/aggregate load-in/load-out emissions are determined based upon the following equation as found in (AP-42, Fifth edition, Section 13.2-4)(1/95)

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

E = emission factor for aggregate unloading

k = particle size multiplier = 0.74 for PE

U = mean wind speed (mph) = 8.1

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

$$E = 0.74(0.0032)(8.1/5)^{1.3}/(4/2)^{1.4} \text{ lbs/ton} = 0.002 \text{ lbs PE/ton sand for all materials except RAP}$$

The total emissions from the load-in/Loadout of the storage piles is determined by use of the above emission factor and the annual process weight rate for each storage pile, as described below:



Storage Pile	Annual PWR in Tons	Annual Emissions in Tons
Coarse aggregate	1,460,000	1.23
Fine aggregate	1,460,000	1.23
RAP	730,000	0.45

Therefore, the total annual emissions from the load in/loadout activities equals 2.90 Tons.

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

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

where E equals the emission factor in lbs/day/acre
s equals the silt content of the stored materials
p equals the number of days w more than 0.1 inch of precipitation
f equals the percentage of time the wind speed exceeds 12 mph
A equals the totals surface area of the specific storage pile

For each storage pile type, s equals 2(Coarse aggregate),7(Fine aggregate) and 10(RAP), P equals 136.7 and f equals 9.9. Based upon the surface area of each storage pile type, the contribution to the total particulate emissions from each storage pile type is as follows:

Storage Pile	Acres	Annual Emissions in Tons
Coarse aggregate	0.55	0.15
Fine aggregate	0.55	0.51
RAP	0.27	0.36

The total emissions from wind erosion are therefore 1.01 tons per year. Summation of the emissions due to load in/load out and wind erosion results in a total annual particulate emission rate of 3.91 tons.

- g) Miscellaneous Requirements
 - (1) None.