



10/22/2014

Certified Mail

Mr. Phil Eisel
Cardinal Aggregates Inc.
8026 Fremont Pike
Perryburg, OH 43551

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0326940003
Permit Number: P0117916
Permit Type: Renewal
County: Fulton

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Interim Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Cardinal Aggregates Inc.**

Facility ID:	0326940003
Permit Number:	P0117916
Permit Type:	Renewal
Issued:	10/22/2014
Effective:	10/22/2014
Expiration:	10/22/2019



Division of Air Pollution Control
Permit-to-Install and Operate
for
Cardinal Aggregates Inc.

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit?	4
3. What records must I keep under this permit?	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application?	4
6. What happens to this permit if my project is delayed or I do not install or modify my source?	5
7. What reports must I submit under this permit?	5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	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?.....	6
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	7
15. What happens if a portion of this permit is determined to be invalid?	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions	10
1. F001, roadways	11
2. F002, Storage piles.....	16



Final Permit-to-Install and Operate
Cardinal Aggregates Inc.
Permit Number: P0117916
Facility ID: 0326940003
Effective Date: 10/22/2014

Authorization

Facility ID: 0326940003
Application Number(s): A0051205
Permit Number: P0117916
Permit Description: Renewal PTIO for the roadways and storage Piles for a portable crushing operation.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 10/22/2014
Effective Date: 10/22/2014
Expiration Date: 10/22/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Cardinal Aggregates Inc.
1613 S. Defiance Street
Archbold, OH 43502

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

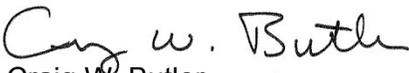
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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


Craig W. Butler
Director



Final Permit-to-Install and Operate
Cardinal Aggregates Inc.
Permit Number: P0117916
Facility ID: 0326940003
Effective Date: 10/22/2014

Authorization (continued)

Permit Number: P0117916
Permit Description: Renewal PTIO for the roadways and storage Piles for a portable crushing operation.

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
Superseded Permit Number:	03-17233
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Storage piles
Superseded Permit Number:	03-17233
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Cardinal Aggregates Inc.
Permit Number: P0117916
Facility ID: 0326940003
Effective Date: 10/22/2014

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit 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 [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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



change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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.



Final Permit-to-Install and Operate
Cardinal Aggregates Inc.
Permit Number: P0117916
Facility ID: 0326940003
Effective Date: 10/22/2014

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Cardinal Aggregates Inc.

Permit Number: P0117916

Facility ID: 0326940003

Effective Date: 10/22/2014

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. All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



Final Permit-to-Install and Operate
Cardinal Aggregates Inc.
Permit Number: P0117916
Facility ID: 0326940003
Effective Date: 10/22/2014

C. Emissions Unit Terms and Conditions



1. F001, roadways

Operations, Property and/or Equipment Description:

Roadways and Parking Areas

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific 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.	OACrule3745-31-05(A)(3)	1.71 tons fugitive particulate emissions (PE)/yr 0.88 tons fugitive particulate matter emissions 10 microns or less in size (PM10)/yr <u>Paved Roadways</u> No visible PE except for 1 minute during any 60-minute period Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See b)(2)b. through b)(2)g. <u>Unpaved Roadways</u> No visible PE except for 3 minutes during



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		any 60-minute period Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See b)(2)b. through b)(2)g.
b.	OACrule3745-17-07(A)	See b)(2)h.
c.	OACrule3745-17-07(B)	See b)(2)h.

(2) Additional Terms and Conditions

- a. The paved and unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadway and parking areas: all paved roadways and parking areas

unpaved roadways and parking areas: all unpaved roadways and parking areas

- b. The permittee shall employ best available control measures on all paved and unpaved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to employ good housekeeping practices and 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 an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of an unpaved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.



- e. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- f. 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.
- g. 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.
- h. The paved and unpaved roadways and parking areas associated with the portable crushing operation (emissions unit P901) permitted under facility ID 0326940003. The emission limitations in Section b)(1) represent the maximum emissions which will be emitted from the roadways and parking areas for any proposed site for relocation of the portable screening operation.

The paved and unpaved roadways and parking areas associated with a portable source are subject to the requirements of OAC rule 3745-17-07(B) and 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. Best Available Technology (BAT) for the roadways and parking areas, as set forth by the requirements/emissions limitations of this permit under OAC 3745-31-05(A)(3), are more stringent than any requirements/emissions limitations as may be applicable under OAC 3745-17-07(B) and OAC 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 the roadways and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once during each day of operation

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once during each day of operation

- (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 inspections 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 (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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 PER in accordance with the monitoring requirements for visible emissions specified above:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.71 tons fugitive PE/yr and 0.88 tons fugitive PM10/yr



Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2 (for paved and unpaved roadways), in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03). Should further updates in AP-42 occur, the most current equations shall be used. These emission limits are calculated using the uncontrolled emission rates (lbs PE/VMT) and maximum vehicle miles traveled per year for each vehicle type, as specified in the permittee's application, and applying a 90% control efficiency for PE and PM10 for use of Best Available Control Measures.

b. Emission Limitation:

No visible PE from the paved roadways and parking areas 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") and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

c. Emission Limitation:

No visible PE from the unpaved roadways and parking areas except for three minutes 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") 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

- 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.	OACrule3745-31-05(A)(3)	4.08 ton fugitive particulate emissions (PE)/yr 2.93 tons fugitive particulate matter emissions 10 microns or less in size (PM10)/yr <u>Load-in and load-out of storage piles:</u> No visible fugitive particulate emissions except for a period of time not to exceed one minute during any 60-minute observation period Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust <u>Wind erosion from storage piles:</u> No visible fugitive particulate emissions



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		except for a period of time not to exceed one minute during any 60-minute observation period Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See b)(2)b. through b)(2)f.
b.	OAC rule 3745-17-07(A)	See b)(2)g.
c.	OAC rule 3745-17-07(B)	See b)(2)g.

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

All product storage piles

- b. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to reduction of drop heights and watering the storage piles as needed to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures is unnecessary.
- d. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering the piles as needed and maintenance of a low pile height to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.



e. The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measures shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

g. The storage piles are associated with the portable crushing operation (emissions unit P901) permitted under facility ID 0326940003. The emission limitations in Section b)(1) represent the maximum emissions which will be emitted from the storage pile operations for any proposed site for relocation of the portable screening operation.

The storage piles are associated with a portable source and are subject to the requirements of OAC rule 3745-17-07(B) and 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. Best Available Technology (BAT) for the storage piles, as set forth by the requirements/emissions limitations of this permit under OAC 3745-31-05(A)(3), are more stringent than any requirements/emissions limitations as may be applicable under OAC 3745-17-07(B) and OAC 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:

storage pile identification minimum load-in inspection frequency

all product storage piles once during each day of operation

(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:

storage pile identification minimum load-out inspection frequency

all product storage piles once during each day of operation

(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:



storage pile identification minimum wind erosion inspection frequency

all product storage piles once during each day of operation

(4) No inspections 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 PER in accordance with the monitoring requirements for visible emissions specified above:



- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

f) Testing Requirements

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

a. Emission Limitation:

4.08 ton fugitive PE/yr

Applicable Compliance Method:

The emission limitation was established by combining the emissions from load-in and load out operations and from wind erosion from each storage pile as listed in the permittee's application. Load-in and load-out operation emissions are based on a maximum load-in and load-out rate of 1,000,000 tons per year of product. Wind erosion emissions are based on a maximum storage pile surface area of 9.1 acre as listed in the permit application:

The emission rates were determined as follows:

Load-in emissions associated with load-in operations were established by multiplying the maximum load-in rate of 1,000,000 tons of product per year by the controlled emission factor from AP-42 section 13.2.4 (1/95) [0.001512 lb PE/ton product], and dividing by 2000 lbs/ton. (0.76 ton fugitive PE/yr)

Load-out-emissions rate is same as for load-in. (0.76 ton fugitive PE/yr)

Wind erosion-emissions were established by multiplying a maximum storage pile surface area of 9.1 acre, the appropriate emission factor from USEPA's Control of Open Fugitive Dust Sources (9/88) [1.54 lbs PE/day/acre of product], a maximum operating schedule of 365 days per year and dividing by 2000. (2.56 ton PE/yr)

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be demonstrated.

b. Emission Limitation:

2.93 ton fugitive PM10/yr

Applicable Compliance Method:



The emission limitation was established by combining the emissions from load-in and load-out operations and from wind erosion from each storage pile as listed in the permittee's application. Load-in and load-out operation emissions are based on a maximum load-in and load-out rate of 1,000,000 tons per year of product. Wind erosion emissions are based on a maximum storage pile surface area of 9.1 acres listed in the permit application:

The emission rates were determined as follows:

Load-in-emissions associated with load-in operations were established by multiplying the maximum load-in rate of 1,000,000 tons of product per year by the controlled emission factor from AP-42 section 13.2.4(1/95) [0.000715 lb PM10/ton product], and dividing by 2000 lbs/ton. (0.36 ton fugitive PM10/yr)

Load-out-emissions rate is the same as for load-in. (0.36 ton fugitive PM10/yr)

Wind erosion-emissions were established by multiplying a maximum storage pile surface area of 9.1 acre, the appropriate emission factor from USEPA's Control of Open Fugitive Dust Sources (9/88) [1.33 lbs PM10/day/acre of product], a maximum operating schedule of 365 days per year and dividing by 2000. (2.21 ton PM10/yr)

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PEL limitation will be demonstrated.

c. Emission Limitation:

No visible fugitive particulate emissions except for a period of time not to exceed one minute during any 60-minute observation period from load-in and load-out of the storage piles

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage pile 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") and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

d. Emission Limitation:

No visible fugitive particulate emissions except for a period of time not to exceed one minute during any 60-minute observation period from wind erosion.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage pile identified above shall be determined in accordance with Test Method 22 as



Final Permit-to-Install and Operate

Cardinal Aggregates Inc.

Permit Number: P0117916

Facility ID: 0326940003

Effective Date: 10/22/2014

set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.