



Environmental Protection Agency

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

8/16/2012

Lynn Radabaugh
MGQ Aggregates
P O Box 130
Old Fort, OH 44861

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0374020222
Permit Number: P0110633
Permit Type: Administrative Modification
County: Seneca

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, Northwest District Office at (419)352-8461 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-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
MGQ Aggregates**

Facility ID:	0374020222
Permit Number:	P0110633
Permit Type:	Administrative Modification
Issued:	8/16/2012
Effective:	8/16/2012
Expiration:	1/9/2019



Division of Air Pollution Control
Permit-to-Install and Operate
for
MGQ Aggregates

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Authorization

Facility ID: 0374020222
Application Number(s): M0001850
Permit Number: P0110633
Permit Description: Administrative modification to correct opacity restriction.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 8/16/2012
Effective Date: 8/16/2012
Expiration Date: 1/9/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MGQ Aggregates
PO Box 130
Old Fort, OH 44861

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

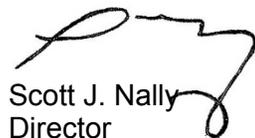
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, 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


Scott J. Nally
Director

Authorization (continued)

Permit Number: P0110633

Permit Description: Administrative modification to correct opacity restriction.

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

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

P901

Dried Fines Plant
P0109422
Not Applicable

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

P903

Course Stone Loadouts (T202/T203)
P0109422
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, Northwest 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. P901, Dried Fines Processing Plant

Operations, Property and/or Equipment Description:

limestone loading, product drying, transferring, conveying, and storage with baghouses

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. b)(1)d.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	<p><u>Stack Emissions:</u> See b)(2)c. and c)(1).</p> <p>Baghouse DC-101: 0.03 grain (gr) particulate matter ≤ 10 microns (PM₁₀)/dry standard cubic foot (dscf)</p> <p>Baghouse DC-501: 0.01 gr PM₁₀/dscf</p> <p>Baghouse DC-102: 0.01 gr PM₁₀/dscf</p> <p><u>Fugitive Emissions:</u></p> <p>Visible fugitive emissions shall not exceed 20% opacity, as a three-minute average from the raw material handling/dryer feed operations.</p> <p>Visible fugitive emissions shall not exceed 5% opacity, as a three-minute average from the partially enclosed</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>product handling emissions points that are vented to a baghouse.</p> <p>There shall be no visible fugitive emissions from the totally enclosed product handling emissions points that are vented to a baghouse.</p>
b.	OAC rule 3745-31-05(F)	<p><u>Stack Emissions:</u></p> <p>23.26 tons PM₁₀/year, combined for baghouses DC-101, DC-501, and DC-102</p> <p>Baghouse DC-101: 3.55 pounds PM₁₀/hour</p> <p>Baghouse DC-501: 0.90 pound PM₁₀/hour</p> <p>Baghouse DC-102: 0.86 pound PM₁₀/hour</p> <p>Visible particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average from the stacks serving Baghouses DC-501 and DC-102.</p> <p>Visible PE shall not exceed 5% opacity, as a six-minute average from the stack serving Baghouse DC-101.</p> <p>See b)(2)c., b)(2)d., and c)(1).</p>
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p><u>Natural Gas Combustion Emissions:</u></p> <p>0.66 pound nitrogen oxides (NOx)/hour; 2.89 tons NOx/year</p> <p>0.56 pound carbon monoxide (CO)/hour; 2.45 tons CO/year</p> <p>See b)(2)e. and b)(2)f.</p>
d.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006	See b)(2)g.
e.	OAC rule 3745-17-11(B)	<p><u>Passive Bin Vent Filter for T-202:</u> 28.4 pounds PE/hour</p> <p><u>Passive Bin Vent Filter for T-203:</u> 28.4 pounds PE/hour</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)h. and b)(2)i.
f.	OAC rule 3745-17-07(A)	<u>Passive Bin Vent Filters:</u> 20% opacity as a six-minute average, except as provided by rule See b)(2)j.
g.	OAC rule 3745-17-08(B)	The permittee 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 emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
h.	OAC rule 3745-17-07(B)	This emission 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).
i.	OAC rule 3745-18-06(E)	412.5 pounds SO ₂ /hour [See b)(2)e.]

(2) Additional Terms and Conditions

- a. The dried fines processing operation includes the following operations and employs the following control measures for the purpose of ensuring compliance with the above-mentioned applicable requirements, as identified in the permit application:

Operation	Equipment	Control Measures
Raw Material Feed to Dryer	(1) front-end loader	High inherent moisture content of limestone*.
	(1) feeder	
	(3) conveyors	
	(1) scalping screen	
Aggregate Drying	(1) natural gas fluidized bed limestone dryer	Baghouse DC-101
Product Handling	(1) surge hopper	Enclosures vented to either Baghouse DC-102 or DC-501.
	(2) feeders	
	(2) screens	
	(1) crusher (<25 TPH)	
	(21) enclosed conveying operations (belts, screw conveyors, and bucket	



Operation	Equipment	Control Measures
	elevators)	
	(1) air separator system	Baghouse DC-501
	(1) coarse dried aggregate storage bin (T-202)	Passive Bin Vent T-202
	(1) coarse/oiled dried aggregate storage bin (T-203)	Passive Bin Vent T-203
	(2) dried aggregate storage bins (T-401 and T-502)	Baghouse DC-102
	(1) waste fines bin (T-101)	Baghouse DC-102

* 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 wet suppression, or other suitable fugitive dust control measures, to ensure compliance.

Nothing in this term 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. Baghouse DC-102 is shared with emissions unit P903, product load-out operations. The emission rates established in this permit for DC-102 are inclusive of both emissions units.
- d. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:
 - i. DC-101: 3.55 pounds PM₁₀/hour;
 - ii. DC-501: 0.90 pound PM₁₀/hour;
 - iii. DC-102: 0.86 pound PM₁₀/hour;
 - iv. DC-101, DC-501, and DC-102, combined: 23.26 tons PM₁₀/year;

- v. Visible PE from the stacks serving DC-501 and DC-102 shall not exceed 0% opacity, as a six minute average; and
- vi. Visible PE from the stack serving DC-101 shall not exceed 5% opacity, as a six minute average.

All emissions of particulate matter from the dust collector stacks are PM₁₀.

- e. Natural gas combustion is the only source of sulfur dioxide (SO₂) and volatile organic compound (VOC) emissions from this source. The potential to emit of SO₂ and VOC from this emissions unit is negligible; therefore, permit allowables were not established pursuant to OAC rule 3745-31-05(A)(3).

The hourly potential to emit for SO₂ and VOC may be calculated using the following equation:

pound pollutant ⁽¹⁾	6.75 mmBtu ⁽²⁾	1020 Btu ⁽³⁾
10 ⁶ ft ³	hour	ft ³

Where:

- (1) Natural gas combustion emission factor from AP-42, Chapter 1.4 (7/98).
- (2) Maximum natural gas usage rate, as supplied in the permit application.
- (3) Conversion factor.

- f. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3), as effective 12/1/2006, will no longer apply.

- g. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the NO_x and CO emissions from this air contaminant source since the potential to emit (PTE) is less than 10 tons per year.

- h. The emission limitations specified by this rule for DC-101, DC-501, and DC-201 are less stringent than the emission limitations established pursuant to the

voluntary restrictions and BAT requirements established in this permit [See b)(2)d].

- i. This emissions unit includes two coarse aggregate storage silos that are equipped with passive bin vent filters (T-202 and T-203). The bin vent filters provide control of fugitive emissions during silo loading; however, the emissions prior to control are negligible. Therefore, no emission limitations have been established as BAT requirements.

The uncontrolled potential to emit of PE from each bin vent is 0.025 pound/hour and 0.11 ton/year, as calculated using the following equation:

$$\frac{0.0014 \text{ lb PE}^{(1)}}{\text{ton}} \times \frac{\text{tons aggregate loaded}^{(2)}}{\text{hour}}$$

- (1) AP-42 Chapter 13.2.4 (11/2006) emission factor.
- (2) Maximum hourly production rate supplied by the company in the permit application.

- j. The visible emission limitations specified by this rule for DC-101, DC-501, and DC-201 are less stringent than the visible emission limitations established pursuant to the voluntary restrictions and BAT requirements established in this permit [See b)(2)d].
- k. The aggregate processing operations associated with this emissions unit are not subject to the requirements of 40 CFR Part 60, Subpart OOO because the maximum material throughput to the crusher is less than 25 tons per hour.

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)d]:
 - a. The limestone dryer associated with this emissions unit shall be vented to a dust collection system (DC-101) capable of achieving a maximum outlet concentration of 0.03 gr/dscf for PM₁₀.
 - b. The dust collection systems (DC-501 and DC-102) controlling the product handling operations associated with this emissions unit shall be capable of achieving maximum outlet concentrations of 0.01 gr/dscf for PM₁₀.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving baghouses: DC-101, DC-501, and DC-102. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the total duration of any visible emission incident; and
- b. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each baghouse serving this emissions unit.

- (2) The permittee shall perform daily visible emission inspections of the raw material dryer feed operations during representative, normal operating conditions in order to determine if control measures need to be implemented. The permittee shall maintain daily records of the following:
 - 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); and
 - c. the dates the control measure(s) was/were implemented.

The information above shall be kept separately for each raw material dryer feed operation serving this emissions unit.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the enclosed product handling emission points. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. the total duration of any visible emissions incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) **Reporting Requirements**

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
- a. all visible emissions checks during which any visible particulate emissions were observed from the stacks serving baghouses: DC-101, DC-501, and DC-102 that are associated with this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible fugitive emission inspections in term d)(2) above:
- a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (5) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible fugitive emissions in term d)(3) above:
- a. all visible emission checks during which any visible fugitive emissions were observed from the enclosed product handling emission points; and
 - b. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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 Limitations:

0.03 grain PM₁₀/dscf (DC-101)

0.01 grain PM₁₀/dscf (DC-501 and DC-102)

Applicable Compliance Method:

If required, compliance with the emission limitations shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

b. Emission Limitations:

3.55 pounds PM₁₀/hour (DC-101)

0.90 pound PM₁₀/hour (DC-501)

0.86 pounds PM₁₀/hour (DC-102)

Applicable Compliance Method:

Each hourly emission limitation represents the potential to emit of each baghouse serving the dried fines processing operation and can be calculated using the following equation:

gr PM ₁₀ ⁽¹⁾ dscf	dscf ⁽²⁾ minute	1 pound ⁽³⁾ 7000 grains	60 minutes ⁽³⁾ hour
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Where,

⁽¹⁾ Maximum outlet grain loading of each baghouse (DC-101 = 0.03 gr/dscf; DC-501 and DC-102 = 0.01 gr/dscf), as supplied in the permit application.

⁽²⁾ Maximum outlet gas flow rate of each baghouse (DC-101 = 13,800 dscfm; DC-501 = 10,500 dscfm; and DC-102 = 10,000 dscfm), as supplied in the permit application.

⁽³⁾ Conversion factors.

If required, compliance with this emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

c. Emission Limitation:

23.26 tons PM₁₀/year, combined for both baghouses

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

5.31 pounds PM ₁₀ ⁽¹⁾ hour	8760 hours ⁽²⁾ year	1 ton ⁽³⁾ 2000 pounds
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Where,

(1) Combined, hourly emission limitation for the baghouses.

(2) Maximum annual operating scheduled.

(3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitations, compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitations

0.66 pound NOx/hour

0.56 pound CO/hour

Applicable Compliance Method

The hourly emission limits represent the potential to emit for NOx and CO and may be calculated using the following equation:

pound pollutant ⁽¹⁾ 10 ⁶ ft ³	6.75 mmBtu ⁽²⁾ hour	1020 Btu ⁽³⁾ ft ³
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Where:

(1) Natural gas combustion emission factor from AP-42, Chapter 1.4 (7/98).

(2) Maximum natural gas usage rate, as supplied in the permit application.

(3) Conversion factor.

e. Emission Limitations

2.89 tons NOx/year

2.45 tons CO/year

Applicable Compliance Method

The annual emission limitations were calculated using the following equation:



pound pollutant ⁽¹⁾ hour	8760 hours ⁽²⁾ year	1 ton ⁽³⁾ 2000 pounds
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Where,

(1) Hourly emission limitation for NOx or CO.

(2) Maximum annual operating scheduled.

(3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitations, compliance with the annual emission limitations shall also be demonstrated.

f. Emission Limitations

Visible PE shall not exceed 0% opacity, as a six-minute average from the stacks serving DC-501 and DC-102.

Visible PE shall not exceed 5% opacity, as a six-minute average from the stack serving DC-101.

Applicable Compliance Method

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g. Emission Limitations

Visible fugitive emissions shall not exceed 20% opacity, as a three-minute average from the raw material handling/dryer feed operations.

Visible fugitive emissions shall not exceed 5% opacity, as a three-minute average from the partially enclosed product handling emissions points that are vented to a baghouse.

Applicable Compliance Method

If required, compliance shall be determined in accordance with Test Method 9, 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)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

h. Emission Limitation

There shall be no visible fugitive emissions from the totally enclosed product handling emissions points that are vented to a baghouse.

Applicable Compliance Method

If required, compliance 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").

i. Emission Limitations (Passive Bin Vent Filters)

28.4 pounds PE/hour per passivebin vent filter

20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance with the above emission limitations shall be determined in accordance with OAC rule 3745-17-03(B).

g) Miscellaneous Requirements

(1) None.



2. P903, Load-out Operations

Operations, Property and/or Equipment Description:

product (dried limestone) load-out operations

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

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

a. b)(1)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(F) with particulate matter and opacity limits. Row b: OAC rule 3745-31-05(A)(3) with fugitive PM10 and opacity limits.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		average from the load-out operations associated with storage silos T-101, T-202, and T-203. See b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006	See b)(2)d.
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.
f.	OAC rule 3745-17-08(B)	The permittee 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 emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
g.	OAC rule 3745-17-07(B)	This emission 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).

(2) Additional Terms and Conditions

- a. The product load-out operation includes truck loading from the following storage silos and employs the following control measures for the purpose of ensuring compliance with the above-mentioned applicable requirements, as identified in the permit application:

Storage Silo ID	Description	Control Measures
T-401	Dried limestone fines	Telescopic chute with baghouse; 3-sided enclosure.
T-502	Dried limestone fines	Telescopic chute with baghouse; 3-sided enclosure.
T-202	Dried coarse limestone	Dump gate spout; 3-sided enclosure.
T-203	Dried coarse and oiled limestone	Oiled aggregate; dump gate spout; 3-sided enclosure.
T-101	Dried waste fines	Adjustable enclosed screw auger; water spray application

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

- b. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:
- i. 0.86 pound PM₁₀/hour and 3.77 tons PM₁₀/year;
 - ii. visible PE from the stack serving baghouse DC-102 shall not exceed 0% opacity, as a six minute average; and
 - iii. visible fugitive emissions shall not exceed 10% opacity, as a three-minute average from the load-out operations associated with the dried fines storage silos (T-401 and T-502).

All emissions of particulate matter from the dust collector stack are PM₁₀.

Baghouse DC-102 is shared with emissions unit P901, dried limestone processing operations. The emission rates established in this permit are inclusive of both emissions units.

- c. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/2001 have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)b.].

It should be noted that the voluntary restrictions were established with the intentional purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/2006 [See b)(2)d.].

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3), as effective 12/1/2006 will no longer apply.

It should also be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- d. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the PM₁₀ emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the practically and legally enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the voluntary restrictions and BAT requirements established in this permit [See b)(2)b.].
- f. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to the voluntary restrictions and BAT requirements established in this permit [See b)(2)b.].

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)b.]:

- a. The load-out operations associated with the dried limestone fines storage silos (T-401 and T-502) shall be vented to a dust collection system capable of achieving a maximum outlet concentration of 0.01 gr/dscf for PM₁₀.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack of the dust collector serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. the total duration of any visible emission incident; and
- c. any corrective actions taken to eliminate the visible emissions.

[As the facility is currently configured, this emissions unit shares baghouse DC-102 with emissions unit P901. As such, the above monitoring and recordkeeping requirement will be satisfied provided the facility meets the duplicative monitoring and recordkeeping requirement specified for emissions unit P901.]

(2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the load-out operation associated with each storage silo. The presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:

- a. whether the emissions are representative of normal operations;
- b. if the emissions are not representative of normal operations, the cause of the visible emissions;
- c. the total duration of any visible emission incident; and
- d. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each storage silo serving this emissions unit.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
 - a. all visible emissions checks during which any visible particulate emissions were observed; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

[As the facility is currently configured, this emissions unit shares baghouse DC-102 with emissions unit P901. As such, the above reporting requirement will be satisfied provided the facility meets the duplicative reporting requirement specified for emissions unit P901.]

- (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
 - a. all visible emission checks during which any visible fugitive emissions were observed from the load-out operations associated with this emissions unit; and

- b. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no visible emissions were observed and no corrective actions were taken.

f) Testing Requirements

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

- a. Emission Limitation

0.01 gr PM₁₀/dscf

Applicable Compliance Method

If required, compliance with the emission limitations shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

- b. Emission Limitation

0.86 pound PM₁₀/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit of the baghouse serving the load-out operations associated with the dried fines storage silos and can be calculated using the following equation:

0.01 gr PM ₁₀ ⁽¹⁾ dscf	10,000 dscf ⁽²⁾ minute	1 pound ⁽³⁾ 7000 grains	60 minutes ⁽³⁾ hour
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Where,

- (1) Maximum outlet grain loading of the baghouse, as supplied in the permittee’s application.
- (2) Maximum outlet gas flow rate of the baghouse, as supplied in the permittee’s application.

- (3) Conversion factors.

If required, compliance with this emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

c. Emission Limitation

3.77 tons PM₁₀/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.86 pound PM ₁₀ ⁽¹⁾ hour	8760 hours ⁽²⁾ year	1 ton ⁽³⁾ 2000 pounds
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Where,

(1) Combined, hourly emission limitation for the baghouses.

(2) Maximum annual operating scheduled.

(3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitation, compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitation

0.87 ton fugitive PM₁₀/year

Applicable Compliance Method

The annual emission limitation may be demonstrated by combining the annual emission rates from the load-out operations associated with each product storage silo (T-401, T-502, T-202, T-203, and T-101). The annual emission rate from each storage silo can be calculated using the following equation:

tons aggregate ⁽¹⁾ year	0.035 lb ⁽²⁾ ton	1-CE ⁽³⁾	1 ton ⁽⁴⁾ 2000 lbs
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Where:

(1) Maximum annual aggregate throughput for each storage silo, as identified in the permit application.

(2) Emission Factor from AP-42, Chapter 13.2.4 (11/06).

(3) Control efficiency for the use of control measures to reduce particulate emissions during the load-out of material from each storage silo, as identified in the permit application.

Storage Silo ID	Control Measure	Control Efficiency
T-401	Telescopic chute & baghouse	95%
T-502		
T-203	Oiled aggregate	80%
T-101	Enclosed screw auger	50%
	Water spray application	50%

(4) Conversion factor.

e. Emission Limitation

Visible PE from the stack serving baghouse DC-102 shall not exceed 0% opacity, as a six minute average.

Applicable Compliance Method

If required, compliance shall be determined in accordance with Test Method 9, as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”).

f. Emission Limitations

Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average from the load-out operations associated with the dried fines storage silos (T-401 and T-502).

Visible fugitive emissions shall not exceed 20% opacity, as a three-minute average from the load-out operations associated with storage silos T-101, T-202, and T-203.

Applicable Compliance Method

If required, compliance shall be determined in accordance with Test Method 9, 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)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g) **Miscellaneous Requirements**

(1) None.