



State of Ohio Environmental Protection Agency

Street Address:

122 S. Front Street  
06/20/03

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:  
Lazarus Gov. Center  
P.O. Box

**CERTIFIED MAIL**

**RE: Final Title V Administrative Permit Amendment Chapter  
3745-77 permit**

03-72-00-0127  
MARTIN MARIETTA MAGNESIA SPECIALTIES INC.  
Joseph P. Montgomery Mr.  
1330 Dayton-Xenia Road  
Xenia, OH 45385

Dear Joseph P. Montgomery:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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, Ohio 43215

If you have any questions, please contact Northwest District Office.

Sincerely,

Michael W. Ahern  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

cc: Northwest District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

**FINAL TITLE V ADMINISTRATIVE PERMIT AMENDMENT**

Effective Date: **06/20/03**

Expiration Date: **06/20/08**

Modification Issue Date: **06/20/03**

This document constitutes issuance of a Title V permit for Facility ID: 03-72-00-0127 to:  
MARTIN MARIETTA MAGNESIA SPECIALTIES INC.

755 Lime Road  
Woodville, OH 43469-9727

**Emissions Unit ID (Company ID)/Emissions Unit Activity Description**

F001 (Paved/Unpaved Roadways) Unpaved roads, paved roads, and parking areas, plant roadways, quarry roadways & parking lot	P004 (Lime screening & briquetting - north plant) Lime processing building - north plant	P019 (#2 Lime Kiln) Rotary lime kiln with multiclone & baghouse
F002 (Storage piles, plant stockpiles) Stockpiles	P008 (Coal pulverizers - north plant) Coal crushing and screening - north plant	P023 (Coal handling - south plant) Coal crushing and screening - south plant
F003 (Lime transfer & storage - south plant) Lime/DBD loadout spouts - south plant	P010 (#5 Rotary Kiln) Rotary lime kiln with multiclone & baghouse	P027 (Lime screening & briquetting - south plant) Lime/DBD product processing - south plant
F004 (Dust loadout system - south plant) #1 & #2 kiln dust loadout - south plant	P011 (Material handling, mixing and packing) DBD Packhouse	P029 (MgO plant dryer) Filter cake dryer - MgO plant
F005 (Stone crushing & screening - north plant) Primary, secondary & tertiary crushing & screening - north plant	P013 (#4 Rotary Kiln) Rotary lime kiln with multiclone & baghouse	P030 (MgO plant calciner) Rotary calciner - MgO plant
F006 (Dust loadout system - north plant) 400 & 500 ton dust bins - north plant	P014 (#6 Rotary Kiln) Rotary lime kiln with multiclone & baghouse	P031 (MgO plant packaging system) Pulverizer mill and bagging system - MgO plant
F007 (Lime loadout - north plant) Railcar/truck lime loadout system - north plant	P015 (#1 Lime Kiln) Rotary lime kiln with multiclone & ESP	P032 (Refractory crushing, screening & storage) DBD processing
F008 (Mineral extraction, overburden removal) Quarry extraction/drilling	P018 (Stone plant) Stone processing - south plant	P033 (DBD processing) DBD crushing, screening, milling & transfer

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones  
Director



Facility Name: MARTIN MARIETTA MAGNESIA SPECIALTIES INC.  
Facility ID: 0372000127

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **Monitoring and Related Record Keeping and Reporting Requirements**

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

- i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation,

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and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC

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rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

## **3. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## **4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **5. Severability Clause**

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A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

## **7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## **8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

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**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

*(Authority for term: OAC rule 3745-77-07(B))*

**12. Compliance Requirements**

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- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.

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- (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

**14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

**16. Off-Permit Changes**

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The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.) *(Authority for term: OAC rule 3745-77-07(I))*

#### **17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

#### **18. Insignificant Activities**

**Facility Name: MARTIN MARIETTA MAGNESIA SPECIALTIES INC.**  
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Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**19. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**Facility Name: MARTIN MARIETTA MAGNESIA SPECIALTIES INC.**  
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**B. *State Only Enforceable Section***

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**2. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**3. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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Facility ID: 0372000127

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

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## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforceable Section

1. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for lime manufacturing, 40 CFR Part 63, Subpart AAAAA. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
2. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
  - a. for a new affected source, the anticipated date of startup of operation;
  - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
  - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
  - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
  - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
  - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.
2. The Part II application for a MACT determination may, but is not required to, contain

**Facility Name: MARTIN MARIETTA MAGNESIA SPECIALTIES INC.**  
**Facility ID: 0372000127**

the following information:

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
  - b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
  - c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.
3. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:
- a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
    - i. the name and mailing address of the permittee;
    - ii. the physical location of the source if it is different from the mailing address;
    - iii. identification of the relevant MACT standard and the source's compliance date;
    - iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
    - v. a statement confirming the facility is a major source for HAPs.
  - b. Unless otherwise specified in the relevant Subpart, within 60 days following

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completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:

i the methods used to determine compliance;

ii the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;

iii the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;

iv the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;

v. an analysis demonstrating whether the affected source is a major source or an area source;

vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and

vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

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**B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

K001 - Paint spray booth - product application center  
P028 - MgO plant pneumatic unloading system  
T001 - Fuel tank - south plant  
T003 - Fuel tank - north plant  
Z001 - Lindig shredder  
Z002 - Lindig shredder - engine  
Z003 - Cleaver Brooks boiler

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

**Emissions Unit: Paved/Unpaved Roadways (F001)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Paved/Unpaved Roadways (F001)

**Activity Description:** Unpaved roads, paved roads, and parking areas, plant roadways, quarry roadways & parking lot

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas (see section A.I.2.a)	OAC rule 3745-17-07(B)(4)	no visible particulate emissions from paved roadways except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8), (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from paved roadways (see Sections A.I.2.c, and A.I.2.f through A.I.2.j)
unpaved roadways and parking areas (see section A.I.2.b)	OAC rule 3745-17-07(B)(5)	no visible particulate emissions from unpaved roadways except for 13 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(2)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from unpaved roadways (see Sections A.I.2.d through A.I.2.i)

**Emissions Unit: Paved/Unpaved Roadways (F001)**

**2. Additional Terms and Conditions**

- a. The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways: asphalt road, concrete, stone-paved

paved parking areas: asphalt parking

- b. The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways: stone-unpaved

unpaved parking areas: none

- c. The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- e. 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 a paved or 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.

**Emissions Unit: Paved/Unpaved Roadways (F001)**

- f. 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 a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- g. 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.
- h. 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.
- i. 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 3745-17-08.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadways and parking areas in accordance with the following frequencies:
  - paved roadways and parking areas: minimum inspection frequency:  
asphalt road, concrete, stone- paved, asphalt parking daily
  - unpaved roadways and parking areas: minimum inspection frequency:  
stone-unpaved daily
- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance

**Emissions Unit: Paved/Unpaved Roadways (F001)**

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 may, upon receipt of written approval from the Ohio EPA modify, the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. 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 4.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.

**IV Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - 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.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be

**Emissions Unit: Paved/Unpaved Roadways (F001)**

determined in accordance with the following method:

- a. Emission Limitation: no visible particulate emissions from paved roadways except for 6 minutes during any 60-minute period

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(4).

- b. Emission Limitation: no visible particulate emissions from unpaved roadways except for 13 minutes during any 60-minute period

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(4).

**VI Miscellaneous Requirements**

None

**Emissions Unit: Paved/Unpaved Roadways (F001)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Storage piles, plant stockpiles (F002)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Storage piles, plant stockpiles (F002)

**Activity Description:** Stockpiles

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
load-in and load-out of storage piles (see section A.I.2.a for identification of storage piles)	OAC rule 3745-17-07(B)(6)	no visible particulate emissions from any storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period
wind erosion from storage piles (see section A.I.2.a for identification of storage piles)	OAC rule 3745-17-08(B), (B)(6)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.b, A.I.2.c and A.I.2.f)
wind erosion from storage piles (see section A.I.2.a for identification of storage piles)	OAC rule 3745-17-07(B)(6)	no visible particulate emissions from any storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period
wind erosion from storage piles (see section A.I.2.a for identification of storage piles)	OAC rule 3745-17-08(B), (B)(6)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.d through A.I.2.f)

**Emissions Unit: Storage piles, plant stockpiles (F002)**

**2. Additional Terms and Conditions**

- a. The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

aggregate products, byproducts, fuels

- b. The permittee shall employ reasonably 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 maintain minimal drop heights from loader buckets and to maintain a sufficient moisture level in the stone to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- d. The permittee shall employ reasonably 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 maintain a sufficient moisture level in the stone, use a suitable dust suppressant, and/or use wind blocks/screens to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of

**Emissions Unit: Storage piles, plant stockpiles (F002)**

OAC rule 3745-17-08.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

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:
aggregate products, by-products, fuels	weekly

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:
aggregate products, by-products, fuels	weekly

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:
aggregate products, by-products, fuels	weekly

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

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

6. The permittee may, upon receipt of written approval from the Ohio EPA modify the

**Emissions Unit: Storage piles, plant stockpiles (F002)**

above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

7. 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 7.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.

**IV Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - 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.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

**Emissions Unit: Storage piles, plant stockpiles (F002)**

Emission Limitation: no visible particulate emissions from any storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(4).

**VI Miscellaneous Requirements**

None

**Emissions Unit: Storage piles, plant stockpiles (F002)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime transfer & storage - south plant  
(F003)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Lime transfer & storage - south plant (F003)

**Activity Description:** Lime/DBD loadout spouts - south plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
lime/DBD loadout - south plant, with baghouse	OAC rule 3745-17-07(B)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)(3)(b)	0.030 grain per dry standard cubic foot or no visible emissions from the stack, whichever is less stringent
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the control requirements specified by OAC rule 3745-17-08(B).

**2. Additional Terms and Conditions**

- a. The following pieces of equipment associated with this emissions unit are vented to the baghouse: screens, conveyors, silos, bins and loadout equipment.
- b. This emissions unit is not subject to the requirements of 40 CFR, Part 60, Subpart OOO.

**II Operational Restrictions**

**Emissions Unit: Lime transfer & storage - south plant  
(F003)**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

**Emissions Unit: Lime transfer & storage - south plant  
(F003)**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

- b. Emission Limitation: 0.030 grain per dry standard cubic foot

Applicable Compliance Method: The permittee shall determine compliance with the limitation above as follows:

$$E (\text{grain/dscf}) = [(X + Y + Z) / (F \times 60)] \times 7000$$

where:

E = particulate emissions (grain/dscf)

X = loadout (lbs/hr) = maximum production rate (150 tons/hr) x 0.61 (lb/ton)\* x 0.01\*\*

Y = screen (lbs/hr) = maximum production rate (150 tons/hr) x 0.61 (lb/ton)\* x 0.01\*\*

Z = conveyors/transfers (lbs/hr) = maximum production rate (40 tons/hr) x 0.000088

**Emissions Unit: Lime transfer & storage - south plant  
(F003)**

(lb/ton)\*

F = flow rate of exhaust system (18,857 scfm)

\* emission factor from AP-42, Table 11.17-4 (revised 2/98)

\*\* control efficiency of the baghouse is assumed to be 99%

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with OAC rule 3745-17-03(B)(7).

- c. Emission Limitation: no visible emissions

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime transfer & storage - south plant  
(F003)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Dust loadout system - south plant (F004)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Dust loadout system - south plant (F004)

**Activity Description:** #1 & #2 kiln dust loadout - south plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#1 and #2 kiln dust load out - south plant, with 2 baghouses	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20% opacity as a 3-minute average.  0.030 grain per dry standard cubic foot or no visible emissions from the stack, whichever is less stringent  The emission limitation specified by this rule is less stringent than the control requirements specified by OAC rule 3745-17-08(B).
	OAC rule 3745-17-08(B)(3)(b)	
	OAC rule 3745-17-07(A)	

**2. Additional Terms and Conditions**

- a. The following pieces of equipment associated with this emissions unit are vented to the baghouse: conveyors, bins and loadout equipment.
- b. This emissions unit is not subject to the requirements of 40 CFR, Part 60, Subpart OOO.

**II Operational Restrictions**

None

**Emissions Unit: Dust loadout system - south plant (F004)**

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows,

**Emissions Unit: Dust loadout system - south plant (F004)**

doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

- b. Emission Limitation: 0.030 grain per dry standard cubic foot

Applicable Compliance Method: The permittee may determine compliance with the limitation above as follows:

$$E (\text{grain/dscf}) = [ X / (F \times 60) ] \times 7000$$

where:

E = particulate emissions (grain/dscf)

X = bin loading (lbs/hr) = maximum production rate (20 tons/hr) x 0.000088 (lb/ton)\*

F = flow rate of exhaust system (509 scfm)

\* controlled emission factor from AP-42, Table 11.17-4 (revised 2/98)

If required, the permittee shall demonstrate compliance with the PE limitation above in

**Emissions Unit: Dust loadout system - south plant (F004)**

accordance with OAC rule 3745-17-03(B)(7).

- c. Emission Limitation: no visible emissions

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Dust loadout system - south plant (F004)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Stone crushing & screening - north plant (F005)

**Activity Description:** Primary, secondary & tertiary crushing & screening - north plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
1000 tons/hr primary, secondary and tertiary aggregate processing line	40 CFR, Part 60, Subpart OOO	10% opacity (from transfer points, screens, and storage bins) (see A.I.2.a)
	OAC rule 3745-17-07(B)(1)	20% opacity, as a 3-minute average (from transfer points, screens, crushers, and storage bins) (see A.I.2.b)
	OAC rule 3745-17-08(B)	use of reasonably available control measures to minimize dust emissions (see A.I.2.c)
	OAC rule 3745-31-05 (PTI #03-13098)	8.13 TPY particulate matter less than 10 microns (PM10) and 17.08 TPY particulate emissions (PE)
		10% opacity (from specific transfer points, screens, and storage bins) (see A.I.2.d)
		15% opacity (from specific crushers) (see A.I.2.e)

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

See A.I.2.f. |

**2. Additional Terms and Conditions**

- a. The following transfer points, screens, and storage bins are subject to 40 CFR Part 60, Subpart 000:
  - i. Transfer points: 53-0320 to 29-3893, 32-0134 to 29-3893, 29-3893 to 29-3894, 29-3894 to 29-3895, 29-3895 to 53-0327, 29-3895 to 53-0326, 32-0459 to 29-3896, 29-3896 to 29-3894, 53-0327 to 29-3898, 53-0326 to 29-3898, 53-0327 to 29-3897, 53-0326 to 29-3897, 29-3898 to 29-3899, 29-3899 to 29-3900, 29-3897 to 29-1329, 29-1328 to 29-2168, 29-1328 to 4x8 screen, 4x8 screen to 29-1325, 4x8 screen to screen belt, screen belt to radial stacker, 29-1325 to 29-3912, 29-2168 to 29-3912, 29-3912 to 29-3756, 29-3912 to Stone Bin #5, 29-3898 to Primary Transfer Belt Conveyor, Primary Transfer Belt Conveyor to Secondary Transfer Belt Conveyor, Secondary Transfer Belt Conveyor to Main Haulage Belt Conveyor, Pile A to Main Haulage Belt Conveyor, Pile B to Main Haulage Belt Conveyor, Main Haulage Belt Conveyor to South Transfer Belt Conveyor, South Transfer Belt Conveyor to Stacker Feed Belt Conveyor, and Stacker Feed Belt Conveyor to Elevating Radial Stacker;
  - ii. Screens: 4x8 screen; and
  - iii. Storage bins: none.
- b. The following transfer points, screens, crushers, and storage bins are subject to 3745-17-07(B)(1):
  - i. Transfer points: 29-1953 to 32-0133, 32-0133 to 29-1332, 29-1332 to 29-1331, 29-1331 to 53-0320;
  - ii. Screens: 53-0320;
  - iii. Crushers: 32-0133, 32-0134; and
  - iv. Storage bins: none.
- c. The permittee shall employ reasonably available control measures to minimize or

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

eliminate visible emissions of fugitive dust from the emissions unit. If the inherent moisture in the stone is not sufficient to comply with the opacity restrictions of this permit, the permittee shall apply water, or any other suitable dust suppressant, at appropriate locations on the line.

- d. The following transfer points, screens, and storage bins are limited to 10% opacity:
  - i. Transfer points: 29-1329 to 29-1330, 29-1933 to 29-1328, 29-1927 to 29-1328, 29-1928 to 29-1328, 29-1965 to 29-1328, 29-1931 to 29-1328, 29-1932 to 29-1328, 29-1929 to 29-1328, 29-1930 to 29-1328, 29-3756 to Stone Bin #5, 29-3756 to Stone Bin #6, 29-3756 to 29-1316 and 29-1316 to Stone Bin #4;
  - ii. Screens: 53-0327, 53-0326; and
  - iii. Storage bins: Stone Bin #4, Stone Bin #5 and Stone Bin #6.
- e. The following crusher is limited to 15% opacity: 32-0459.
- f. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B) and 40 CFR, Part 60, Subpart OOO.

**II Operational Restrictions**

- 1. The moisture content of the processed aggregate shall be maintained at no less than 1.5% by weight.
- 2. The permittee shall not exceed 4,576,000 tons per year of aggregate processed in this emissions unit (this restriction is based on the stone throughput of the primary crusher).

**III Monitoring and/or Record keeping**

- 1. The permittee shall maintain monthly records of the amount, in tons, of aggregate processed through the primary crusher of this emissions unit.
- 2. The permittee shall maintain quarterly records of the moisture content, by weight, of the aggregate processed. The moisture content of the aggregate, including location of sampling, frequency of testing and analytical procedures, shall be performed in accordance with methods and procedures approved by the Ohio EPA.
- 3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., crushers, screens, transfer points, storage bins etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

are observed, the permittee shall also note the following in the operations log:

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit annual reports which summarize the annual amount of aggregate processed in this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all daily records showing that the moisture content restriction for the aggregate processed was not met. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., crushers, screens, transfer points, storage bins etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

- a. Emission Limitation: 10% opacity (from specific transfer points, screens and storage bins)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 9 of 40 CFR Part 60, Appendix A.
- b. Emission Limitation: 20% opacity (from specific transfer points, screens and storage bins), as a 3-minute average  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC 3745-17-03(B).
- c. Emission Limitations: 8.13 TPY of PM10 and 17.08 TPY of PE  
  
Applicable Compliance Method: Compliance with the emission limitations above shall be determined based upon the record keeping specified in section A.III.1 above and the emission factors in AP-42, Table 11.19.2-2.
- d. Emission Limitation: 10% opacity (from specific transfer points, screens and storage bins)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 9 of 40 CFR Part 60, Appendix A.
- e. Emission Limitation: 15% opacity (from specific crushers)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 9 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Stone crushing & screening - north plant  
(F005)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Dust loadout system - north plant (F006)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Dust loadout system - north plant (F006)

**Activity Description:** 400 & 500 ton dust bins - north plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
lime/DBD loadout - north plant, with baghouse	OAC rule 3745-17-07(B)(1)  OAC rule 3745-17-08(B)(3)(b)  OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.  0.030 grain per dry standard cubic foot or no visible emissions from the stack, whichever is less stringent  The emission limitation specified by this rule is less stringent than the control requirements specified by OAC rule 3745-17-08(B).

**2. Additional Terms and Conditions**

- a. The following pieces of equipment associated with this emissions unit are vented to the baghouse: conveyors, bins and loadout equipment.
- b. This emissions unit is not subject to the requirements of 40 CFR, Part 60, Subpart OOO.

**II Operational Restrictions**

None

**Emissions Unit: Dust loadout system - north plant (F006)**

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows,

**Emissions Unit: Dust loadout system - north plant (F006)**

doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

- b. Emission Limitation: 0.030 grain per dry standard cubic foot

Applicable Compliance Method:

The permittee may determine compliance with the limitation above as follows:

$$E (\text{grain/dscf}) = [(X + Y) / (F \times 60)] \times 7000$$

where:

E = particulate emissions (grain/dscf)

X = conveyors/transfers (tons/hr) = maximum process weight rate (37.5 tons/hr) x 0.000088 (lb/ton)\*

Y = dry loadout (lbs/hr) = maximum process weight rate (12.5 tons/hr) x 0.61 (lb/ton)\* x 0.01\*\*

F = flow rate of exhaust system (7,902 scfm)

**Emissions Unit: Dust loadout system - north plant (F006)**

\* controlled emission factor from AP-42, Table 11.17-4 (revised 2/98)

\*\* control efficiency of the baghouse is assumed to be 99%

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with OAC rule 3745-17-03(B)(7).

c. Emission Limitation: no visible emissions

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Dust loadout system - north plant (F006)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime loadout - north plant (F007)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Lime loadout - north plant (F007)

**Activity Description:** Railcar/truck lime loadout system - north plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
railcar/truck lime loadout - north plant, with baghouse	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.  0.030 grain per dry standard cubic foot or no visible emissions from the stack, whichever is less stringent  The emission limitation specified by this rule is less stringent than the control requirements specified by OAC rule 3745-17-08(B).
	OAC rule 3745-17-08(B)(3)(b)	
	OAC rule 3745-17-07(A)	

**2. Additional Terms and Conditions**

- a. The following pieces of equipment associated with this emissions unit are vented to the baghouse: conveyors, bins, silos and loadout equipment.
- b. This emissions unit is not subject to the requirements of 40 CFR, Part 60, Subpart OOO.

**II Operational Restrictions**

None

**Emissions Unit: Lime loadout - north plant (F007)**

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows,

**Emissions Unit: Lime loadout - north plant (F007)**

doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

- b. Emission Limitation: 0.030 grain per dry standard cubic foot

Applicable Compliance Method: The permittee may determine compliance with the limitation above as follows:

$$E (\text{grain/dscf}) = [(X + Y) / (F \times 60)] \times 7000$$

where:

E = particulate emissions (grain/dscf)

X = conveyors/transfers (lbs/hr) = maximum process weight rate (480 tons/hr) x 0.000088 (lb/ton)\*

Y = screens (lbs/hr) = maximum process weight rate (300 tons/hr) x 0.00013 (lb/ton)\*

F = flow rate of exhaust system (18,925 scfm)

**Emissions Unit: Lime loadout - north plant (F007)**

\* controlled emission factor from AP-42, Table 11.17-4 (revised 2/98)

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with OAC rule 3745-17-03(B)(7).

c. Emission Limitation: no visible emissions

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime loadout - north plant (F007)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Mineral extraction, overburden removal (F008)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Mineral extraction, overburden removal (F008)

**Activity Description:** Quarry extraction/drilling

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	truck unloading	<u>Applicable Rules/Requirements</u>
drilling, with fabric filter, water ring, or other acceptable control measure		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-17-08(B)(3)(b)
overburden removal	waste disposal	OAC rule 3745-17-07(B)(1)
		OAC rule 3745-17-08(B)
blasting	reclamation	OAC rule 3745-17-07(B)
		OAC rule 3745-17-08(B)

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

OAC rule 3745-17-07(B)(1)	Applicable Emissions <u>Limitations/Control Measures</u>	not exceed 20% opacity, as a 3-minute average.
OAC rule 3745-17-08(B)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.a.v)
OAC rule 3745-17-07(B)(1)	0.030 grain per dry standard cubic foot or no visible emissions from stack, whichever is less stringent (see A.I.2.a.i)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.
OAC rule 3745-17-08(B)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.a.vi)
OAC rule 3745-17-07(B)(1)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.a.ii)	
OAC rule 3745-17-08(B)	See A.I.2.a.iii.	
	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.a.iii)	
	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.	
	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.a.iv)	
	Visible particulate emissions shall	

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

**2. Additional Terms and Conditions**

a. Mineral extraction includes the following activities: drilling, blasting, overburden removal, truck loading, waste disposal and reclamation. The permittee shall implement the precautions/control strategies listed below to reduce fugitive emissions:

i. Drilling:

(a) Any drill used at this plant shall employ reasonably available control measures (RACM) at all times for the fugitive dust emissions. RACM for drilling operations shall be a fabric filter collection system, water ring, or other acceptable control measure. When drilling occurs, there shall be no visible fugitive emissions from any baghouse or other acceptable control measure that includes an exhaust stack and shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible emissions from the exhaust stack, whichever is less stringent.

(b) No "contract drilling" shall occur at this plant without the permittee first certifying, in writing to the Ohio EPA, Northwest District Office, that the contractor's drilling rig employs RACM.

ii. Overburden removal:

Minimize the disturbance of the land surface and perform the overburden removal such that compliance with the opacity limitation in section A.I.1 can be achieved. Employ, on an "as needed" basis, water and/or any other suitable dust suppressant to control fugitive dust emissions during reclamation operations such that compliance with the opacity limitation in section A.I.1 can be achieved.

iii. Blasting:

None. The opacity limitation shall not apply to blasting operations, per OAC rule 3745-17-07(B)(11)(b).

iv. Truck loading:

Minimize the drop height distance during loading of the truck bed, prevent haul vehicle overloading and maintain inherent moisture level to control fugitive dust emissions during truck loading such that compliance with the opacity limitation in section A.I.1 can be achieved. Water shall be applied as necessary.

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

v. Waste disposal:

Minimize the disturbance of the land surface and perform the waste disposal such that compliance with the opacity limitation in section A.I.1 can be achieved. Employ, on an "as needed" basis, water and/or any other suitable dust suppressant to control fugitive dust emissions during reclamation operations such that compliance with the opacity limitation in section A.I.1 can be achieved.

vi. Reclamation:

Employ, on an "as needed" basis, water and/or any other suitable dust suppressant to control fugitive dust emissions during reclamation operations such that compliance with the opacity limitation in section A.I.1 can be achieved.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. Except as otherwise provided in this section, for the following mineral extraction operations, the permittee shall perform inspections while each operation is occurring, in accordance with the following minimum frequencies:

mineral extraction operation(s)	minimum inspection frequency
Drilling	daily
Blasting	none
Overburden removal	daily
Truck loading	daily
Waste disposal	daily
Reclamation	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions. The purpose of these inspections is to determine whether or not it is necessary to apply water or any other suitable dust suppressant to minimize or eliminate the visible emissions of fugitive dust.
4. The permittee may, upon receipt of written approval from the Ohio EPA, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

5. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., blasting, overburden removal, truck loading, waste disposal, reclamation, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

6. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the drilling operations associated with 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., blasting, overburden removal, truck loading, waste disposal, reclamation, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the drilling operations associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

- b. Emission Limitation: 0.030 grain per dry standard cubic foot (from drilling)

Applicable Compliance Method: The permittee may demonstrate compliance with the limitation above as follows:

$$E \text{ (grain/dscf)} = [X / (F \times 60)] \times 7000$$

where:

E = particulate emissions (grain/dscf)

X = Drilling (lb/hr) = maximum holes drilled (holes drilled/hr) x (1.3 lbs PE/hole drilled)\*  
x 0.01\*\*

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

F = Flow rate of exhaust system (4,526 scfm)

\* emission factor from AP-42, Section 11.19-4

\*\* control efficiency of the baghouse is assumed to be 99%

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with OAC rule 3745-17-03(B)(7).

- c. Emission Limitation: no visible emissions

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Mineral extraction, overburden removal  
(F008)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Lime screening & briquetting - north plant (P004)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Lime screening & briquetting - north plant (P004)

**Activity Description:** Lime processing building - north plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
lime handling - screening and briquetting; north plant lime processing building, with 8 baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20%, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-31-05 (PTI #03-2543)	1.5 lbs PE/hr  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

**2. Additional Terms and Conditions**

- a. This emissions unit is not subject to the requirements of 40 CFR, Part 60, Subpart OOO.
- b. All the PE from this emissions unit shall be vented to the baghouses.

**Emissions Unit: Lime screening & briquetting - north plant  
(P004)**

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission Limitation: 1.5 lbs PE/hr

**Emissions Unit: Lime screening & briquetting - north plant  
(P004)**

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime screening & briquetting - north plant (P004)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Coal pulverizers - north plant (P008)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Coal pulverizers - north plant (P008)

**Activity Description:** Coal crushing and screening - north plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coal pulverizers - north plant, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.a. and A.I.2.b.)

**2. Additional Terms and Conditions**

- a. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the crusher, conveyors, silos, bins and bucket elevators and the use of hooding to minimize or eliminate

**Emissions Unit: Coal pulverizers - north plant (P008)**

visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and

- ii. all fugitive dust captured within the building enclosure shall be vented to baghouse #0715.

\* from the crusher, conveyors, silos, bins and bucket elevators

- b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 pounds per hour.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

- 1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the

**Emissions Unit: Coal pulverizers - north plant (P008)**

corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission Limitation: 10.0 lbs PE/hr

**Emissions Unit: Coal pulverizers - north plant (P008)**

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- c. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: Coal pulverizers - north plant (P008)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: #5 Rotary Kiln (P010)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** #5 Rotary Kiln (P010)

**Activity Description:** Rotary lime kiln with multiclone & baghouse

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary lime kiln #5, with multiclone and baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	143.6 pounds PE/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	40 CFR Part 52.1881(b)(26)(i)	15.42 pounds sulfur dioxide (SO <sub>2</sub> ) per ton of actual process weight input
	OAC rule 3745-18-78(E)(1)	25.0 pounds of SO <sub>2</sub> /ton of product
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.)

**Emissions Unit: #5 Rotary Kiln (P010)**

**2. Additional Terms and Conditions**

- a. In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions units P010, P013, and P014, combined, shall not exceed 143.6 pounds/hour (based on Figure II).
- b. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the kiln, conveyors, bins and bucket elevators and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. all fugitive dust captured within the building enclosure shall be vented to baghouse #0800.

\* from the kiln, conveyors, bins and bucket elevators

**II Operational Restrictions**

1. The pressure drop across the baghouse (#0800) shall be maintained within the range of 6 to 16 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal, petroleum coke and/or natural gas in this emissions unit.
3. The quality of coal and/or petroleum coke burned in this emissions unit shall meet, on an as-received basis, a sulfur content (in percent, by weight) that is no greater than the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25 lbs SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables.

**III Monitoring and/or Record keeping**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across

**Emissions Unit: #5 Rotary Kiln (P010)**

the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

2. The permittee shall collect or require its supplier(s) to collect a representative grab sample of coal and/or petroleum coke from each shipment. A shipment may comprised of multiple loads from the same supplier's batch, and the quality for the coal and/or petroleum coke for those loads may be represented by a single batch analysis from the supplier. In lieu of performing on-site grab sampling, representative fuel analysis performed by fuel supplier(s) is acceptable.

The representative sampling procedures for the collection of coal and/or petroleum coke shall be performed in accordance with the most recently approved ASTM methods.

The representative sample from each shipment of coal and/ or petroleum coke shall be analyzed for sulfur content (weight percent) and heat content (Btu/pound of coal/coke). The procedures for the analytical methods shall be performed in accordance with the most recently approved ASTM methods. Alternative, equivalent methods may be used upon approval from the Ohio PEA, Northwest District Office.

3. The permittee shall maintain monthly records of the total quantity of coal and/or petroleum coke received and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions

### **Emissions Unit: #5 Rotary Kiln (P010)**

were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

#### **IV Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 of the terms and conditions of this permit. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, petroleum coke and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any record which shows the sulfur content (in percent, by weight) of the coal and/or petroleum coke exceeded the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25.0 pounds SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows,

**Emissions Unit: #5 Rotary Kiln (P010)**

doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub> and with the allowable visible PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the following:
    - i. the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A;
    - ii. the allowable visible PE limitations: Method 9 of 40 CFR, Part 60, Appendix A; and
    - iii. the allowable mass emission rate for SO<sub>2</sub>: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
  - d. The tests shall be conducted while this emissions unit and emissions units P013 and P014 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for

**Emissions Unit: #5 Rotary Kiln (P010)**

review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s).

2. During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the pressure drop across the baghouse, in inches water;
  - b. the process weight rate input, in tons;
  - c. the tons of product produced; and
  - d. the sulfur content of the coal and/or petroleum coke burned, in percent by weight.
  
3. Compliance with the emission limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  
  - b. Emission Limitation: 143.6 pounds PE/hour (from units P010, P013 and P014, combined)  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.).
  
  - c. Emission Limitation: 25.0 pounds of SO<sub>2</sub>/ton of product

Applicable Compliance Method: The permittee shall demonstrate compliance with the

**Emissions Unit: #5 Rotary Kiln (P010)**

SO2 limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: 15.42 pounds SO2 per ton of actual process weight input

Applicable Compliance Method: The permittee shall demonstrate compliance with the SO2 limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: #5 Rotary Kiln (P010)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Material handling, mixing and packing  
(P011)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Material handling, mixing and packing (P011)

**Activity Description:** DBD Packhouse

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
material handling, mixing and packing, with 3 baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  See A.I.2.a.
	OAC rule 3745-17-11(B)	

**2. Additional Terms and Conditions**

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 pounds per hour.
- c. All the PE from this emissions unit shall be vented to the baghouses.

**II Operational Restrictions**

None

**Emissions Unit: Material handling, mixing and packing  
(P011)**

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission Limitation: 10.0 lbs PE/hr  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**Emissions Unit: Material handling, mixing and packing  
(P011)**

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Material handling, mixing and packing  
(P011)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: #4 Rotary Kiln (P013)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** #4 Rotary Kiln (P013)

**Activity Description:** Rotary lime kiln with multiclone & baghouse

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary lime kiln #4, with multiclone and baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	143.6 pounds PE/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	40 CFR Part 52.1881(b)(26)(i)	15.42 pounds sulfur dioxide (SO <sub>2</sub> ) per ton of actual process weight input
	OAC rule 3745-18-78(E)(1)	25.0 pounds of SO <sub>2</sub> /ton of product
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.)

**Emissions Unit: #4 Rotary Kiln (P013)**

**2. Additional Terms and Conditions**

- a. In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions units P010, P013, and P014, combined, shall not exceed 143.6 pounds/hour (based on Figure II).
- b. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the kiln, conveyors, bins and bucket elevators and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. fugitive dust captured within the building enclosure shall be vented to baghouse #0800.

\* from the kiln, conveyors, bins and bucket elevators

**II Operational Restrictions**

1. The pressure drop across the baghouse (#0800) shall be maintained within the range of 6 to 16 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal, petroleum coke and/or natural gas in this emissions unit.
3. The quality of coal and/or petroleum coke burned in this emissions unit shall meet, on an as-received basis, a sulfur content (in percent, by weight) that is no greater than the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25 lbs SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables.

**III Monitoring and/or Record keeping**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the

**Emissions Unit: #4 Rotary Kiln (P013)**

baghouse on a weekly basis.

2. The permittee shall collect or require its supplier(s) to collect a representative grab sample of coal and/or petroleum coke from each shipment. A shipment may comprised of multiple loads from the same supplier's batch, and the quality for the coal and/or petroleum coke for those loads may be represented by a single batch analysis from the supplier. In lieu of performing on-site grab sampling, representative fuel analysis performed by fuel supplier(s) is acceptable.

The representative sampling procedures for the collection of coal and/or petroleum coke shall be performed in accordance with the most recently approved ASTM methods.

The representative sample from each shipment of coal and/ or petroleum coke shall be analyzed for sulfur content (weight percent) and heat content (Btu/pound of coal/coke). The procedures for the analytical methods shall be performed in accordance with the most recently approved ASTM methods. Alternative, equivalent methods may be used upon approval from the Ohio PEA, Northwest District Office.

3. The permittee shall maintain monthly records of the total quantity of coal and/or petroleum coke received and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**Emissions Unit: #4 Rotary Kiln (P013)**

5. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 of the terms and conditions of this permit. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, petroleum coke and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any record which shows the sulfur content (in percent, by weight) of the coal and/or petroleum coke exceeded the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25.0 pounds SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**Emissions Unit: #4 Rotary Kiln (P013)**

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub> and with the allowable visible PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the following:
    - i. the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A;
    - ii the allowable visible PE limitations: Method 9 of 40 CFR, Part 60, Appendix A; and
    - iii. allowable mass emission rate for SO<sub>2</sub>: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
  - d. The tests shall be conducted while this emissions unit and emissions units P010 and P014 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

**Emissions Unit: #4 Rotary Kiln (P013)**

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s).

2. During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the pressure drop across the baghouse, in inches water;
  - b. the process weight rate input, in tons;
  - c. the tons of product produced; and
  - d. the sulfur content of the coal and/or petroleum coke burned, in percent by weight.
3. Compliance with the emission limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission Limitation: 143.6 pounds PE/hour (from units P010, P013 and P014, combined)  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.).
  - c. Emission Limitation: 25.0 pounds of SO<sub>2</sub>/ton of product  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

**Emissions Unit: #4 Rotary Kiln (P013)**

- d. Emission Limitation: 15.42 pounds SO<sub>2</sub> per ton of actual process weight input

Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: #4 Rotary Kiln (P013)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: #6 Rotary Kiln (P014)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** #6 Rotary Kiln (P014)

**Activity Description:** Rotary lime kiln with multiclone & baghouse

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary lime kiln #6, with multiclone and baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	143.6 pounds PE/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	40 CFR Part 52.1881(b)(26)(i)	15.42 pounds sulfur dioxide (SO <sub>2</sub> ) per ton of actual process weight input
	OAC rule 3745-18-78(E)(1)	25.0 pounds of SO <sub>2</sub> /ton of product
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a three-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.)

**Emissions Unit: #6 Rotary Kiln (P014)**

**2. Additional Terms and Conditions**

- a. In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions units P010, P013, and P014, combined, shall not exceed 143.6 pounds/hour (based on Figure II).
- b. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the kiln, conveyors, bins and bucket elevators and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. fugitive dust captured within the building enclosure shall be vented to baghouse #0800.

\* from the kiln, conveyors, bins and bucket elevators

**II Operational Restrictions**

1. The pressure drop across the baghouse (#0800) shall be maintained within the range of 6 to 16 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal, petroleum coke and/or natural gas in this emissions unit.
3. The quality of coal and/or petroleum coke burned in this emissions unit shall meet, on an as-received basis, a sulfur content (in percent, by weight) that is no greater than the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25 lbs SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables.

**III Monitoring and/or Record keeping**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

**Emissions Unit: #6 Rotary Kiln (P014)**

2. The permittee shall collect or require its supplier(s) to collect a representative grab sample of coal and/or petroleum coke from each shipment. A shipment may comprised of multiple loads from the same supplier's batch, and the quality for the coal and/or petroleum coke for those loads may be represented by a single batch analysis from the supplier. In lieu of performing on-site grab sampling, representative fuel analysis performed by fuel supplier(s) is acceptable.

The representative sampling procedures for the collection of coal and/or petroleum coke shall be performed in accordance with the most recently approved ASTM methods.

The representative sample from each shipment of coal and/ or petroleum coke shall be analyzed for sulfur content (weight percent) and heat content (Btu/pound of coal/coke). The procedures for the analytical methods shall be performed in accordance with the most recently approved ASTM methods. Alternative, equivalent methods may be used upon approval from the Ohio PEA, Northwest District Office.

3. The permittee shall maintain monthly records of the total quantity of coal and/or petroleum coke received and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

**Emissions Unit: #6 Rotary Kiln (P014)**

5. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 of the terms and conditions of this permit. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, petroleum coke and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any record which shows the sulfur content (in percent, by weight) of the coal and/or petroleum coke exceeded the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitations of 15.42 lbs SO<sub>2</sub>/ton of actual process weight input and 25.0 pounds SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowables. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any

**Emissions Unit: #6 Rotary Kiln (P014)**

visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub> and with the allowable visible PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the following:
    - i. the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A;
    - ii. the allowable visible PE limitations: Method 9 of 40 CFR, Part 60, Appendix A; and
    - iii. the allowable mass emission rate for SO<sub>2</sub>: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
  - d. The tests shall be conducted while this emissions unit and emissions units P010 and P013 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid

**Emissions Unit: #6 Rotary Kiln (P014)**

characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s).

2. During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the pressure drop across the baghouse, in inches water;
  - b. the process weight rate input, in tons;
  - c. the tons of product produced; and
  - d. the sulfur content of the coal and/or petroleum coke burned, in percent by weight.
  
3. Compliance with the emission limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  
  - b. Emission Limitation: 143.6 pounds PE/hour (from units P010, P013 and P014, combined)  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.).
  
  - c. Emission Limitation: 25.0 pounds of SO<sub>2</sub>/ton of product  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

**Emissions Unit: #6 Rotary Kiln (P014)**

- d. Emission Limitation: 15.42 pounds SO<sub>2</sub> per ton of actual process weight input

Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: #6 Rotary Kiln (P014)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: #1 Lime Kiln (P015)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** #1 Lime Kiln (P015)

**Activity Description:** Rotary lime kiln with multiclone & ESP

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary lime kiln #1, with multiclone and ESP	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	79.9 pounds PE/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-18-78(F)	25.0 lbs sulfur dioxide (SO <sub>2</sub> )/ton of product
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.)

**2. Additional Terms and Conditions**

- a. In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions

**Emissions Unit: #1 Lime Kiln (P015)**

units P015 and P019, combined, shall not exceed 79.9 pounds/hour.

- b. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the kiln, conveyors and bins and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. all fugitive dust captured within the building enclosure shall be vented to ESP #0836.

\* from the kiln, conveyors and bins

**II Operational Restrictions**

- 1. The permittee shall burn only coal, petroleum coke and/or natural gas in this emissions unit.
- 2. The quality of coal and/or petroleum coke burned in this emissions unit shall meet, on an as-received basis, a sulfur content (in percent, by weight) that is no greater than the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitation of 25.0 lbs SO<sub>2</sub>/ton of product, times a factor of 1.3, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowable.

**III Monitoring and/or Record keeping**

- 1. The permittee shall collect or require its supplier(s) to collect a representative grab sample of coal and/or petroleum coke from each shipment. A shipment may comprised of multiple loads from the same supplier's batch, and the quality for the coal and/or petroleum coke for those loads may be represented by a single batch analysis from the supplier. In lieu of performing on-site grab sampling, representative fuel analysis performed by fuel supplier(s) is acceptable.

The representative sampling procedures for the collection of coal and/or petroleum coke shall be performed in accordance with the most recently approved ASTM methods.

The representative sample from each shipment of coal and/ or petroleum coke shall be analyzed for sulfur content (weight percent) and heat content (Btu/pound of coal/coke). The procedures for the analytical methods shall be performed in accordance with the most recently approved

**Emissions Unit: #1 Lime Kiln (P015)**

ASTM methods. Alternative, equivalent methods may be used upon approval from the Ohio PEA, Northwest District Office.

2. The permittee shall maintain monthly records of the total quantity of coal and/or petroleum coke received and the results of the analyses for sulfur content and heat content.
3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

4. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the ESP associated with 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

### **Emissions Unit: #1 Lime Kiln (P015)**

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform observations once per month, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the ESP associated with this emissions unit. The visible emissions evaluations shall be performed in accordance with Method 9 of 40 CFR, Part 60 , Appendix A by a certified professional.
6. Notwithstanding the frequency of the monitoring and record keeping requirements specified in section A.III.5, the permittee may reduce the frequency of the Method 9 visible emissions readings for this emissions unit from at least once per month to quarterly readings if the following conditions are met:
  - a. for 1 full quarter, each of the facility's Method 9 visible emissions readings indicate a measured opacity of 10% or less; and
  - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.5.

The permittee shall revert to once per month Method 9 readings if at any time the measured opacity exceeded 10%.

#### **IV Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, petroleum coke and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall notify the Director (appropriate Ohio EPA District Office or local air agency) in writing of any monthly record which shows the sulfur content (in percent, by weight) of the coal and/or petroleum coke exceeded the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitation of 25.0 lbs SO<sub>2</sub>/ton of product, times a factor of 1.1, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowable. The notification shall include a copy of such record and shall be sent to the Director within 45 days after the deviation occurs.

**Emissions Unit: #1 Lime Kiln (P015)**

3. The permittee shall submit quarterly summaries that identify the sections of the ESP that were out of service, along with the time period(s) involved, when the associated emissions unit was in operation.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the ESP associated with this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any Method 9 visible particulate emissions from the ESP associated with this emissions unit exceeded 20% opacity and (b) describe any corrective actions taken to bring the emissions unit into compliance with OAC rule 3745-17-07(A). These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after permit issuance, with 2.5 years after permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub> and with the allowable visible PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the following:
    1. the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A;
    - ii. the allowable visible PE limitations: Method 9 of 40 CFR, Part 60, Appendix A;

**Emissions Unit: #1 Lime Kiln (P015)**

and

- iii. the allowable mass emission rate for SO<sub>2</sub>: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
- d. The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s).

- 2. During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the sulfur content of the coal and/or petroleum coke burned, in percent by weight; and
  - b. the power input, in kilowatts, of each TR set.
- 3. Compliance with the emission limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the

**Emissions Unit: #1 Lime Kiln (P015)**

visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 79.9 pounds PE/hour (for emissions units P015 and P019, combined)

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.).

- c. Emission Limitation: 25.0 lbs SO<sub>2</sub>/ton of product

Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.) and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: #1 Lime Kiln (P015)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Stone plant (P018)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Stone plant (P018)

**Activity Description:** Stone processing - south plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
stone plant with 8 screening operations	OAC rule 3745-17-07(B)(1)  OAC rule 3745-17-08(B)	Visible fugitive particulate emissions (PE) shall not exceed 20% opacity, as a 3-minute average.  reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.a.)

2. **Additional Terms and Conditions**

- a. The permittee shall employ reasonably available control measures to minimize or eliminate visible emissions of fugitive dust from the emissions unit. If the inherent moisture in the stone is not sufficient to comply with the opacity restrictions of this permit, the permittee shall apply water, or any other suitable dust suppressant, at appropriate locations on the line.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the

### **Emissions Unit: Stone plant (P018)**

weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., screens, conveyors, silos and feeders, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

#### **IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., screens, conveyors, silos and feeders, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### **V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**Emissions Unit: Stone plant (P018)**

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Stone plant (P018)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: #2 Lime Kiln (P019)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** #2 Lime Kiln (P019)

**Activity Description:** Rotary lime kiln with multiclone & baghouse

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary lime kiln #2, with multiclone and baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	79.9 pounds PE/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-18-78(F)	25.0 lbs sulfur dioxide (SO <sub>2</sub> )/ton of product
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.)

**2. Additional Terms and Conditions**

- a. In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions

**Emissions Unit: #2 Lime Kiln (P019)**

units P015 and P019, combined, shall not exceed 79.9 pounds/hour (based on Figure II).

- b. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the kiln, conveyors, screens and bins and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. all fugitive dust captured within the building enclosure shall be vented to baghouse #1085.

\* from the kiln, conveyors, screens and bins

**II Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 6 to 16 inches of water while the emissions units are in operation.
- 2. The permittee shall burn only coal, petroleum coke and/or natural gas in this emissions unit.
- 3. The quality of coal and/or petroleum coke burned in this emissions unit shall meet, on an as-received basis, a sulfur content (in percent, by weight) that is no greater than the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitation of 25.0 lbs SO<sub>2</sub>/ton of product, times a factor of 1.3, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowable.

**III Monitoring and/or Record keeping**

- 1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
- 2. The permittee shall collect or require its supplier(s) to collect a representative grab sample of coal and/or petroleum coke from each shipment. A shipment may comprised of multiple loads from the same supplier's batch, and the quality for the coal and/or petroleum coke for those loads may be represented by a single batch analysis from the supplier. In lieu of performing on-site grab

**Emissions Unit: #2 Lime Kiln (P019)**

sampling, representative fuel analysis performed by fuel supplier(s) is acceptable.

The representative sampling procedures for the collection of coal and/or petroleum coke shall be performed in accordance with the most recently approved ASTM methods.

The representative sample from each shipment of coal and/ or petroleum coke shall be analyzed for sulfur content (weight percent) and heat content (Btu/pound of coal/coke). The procedures for the analytical methods shall be performed in accordance with the most recently approved ASTM methods. Alternative, equivalent methods may be used upon approval from the Ohio PEA, Northwest District Office.

3. The permittee shall maintain monthly records of the total quantity of coal and/or petroleum coke received and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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:

**Emissions Unit: #2 Lime Kiln (P019)**

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

**IV Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1 of the terms and conditions of this permit. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, petroleum coke and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any monthly record which shows the sulfur content (in percent, by weight) of the coal and/or petroleum coke exceeded the sulfur content (in percent, by weight) measured during the most recent emission test that demonstrated that the emissions unit was in compliance with the limitation of 25.0 lbs SO<sub>2</sub>/ton of product, times a factor of 1.5, to reflect the fact that past tested, actual emission rates are typically, only of small fraction of the allowable. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

**Emissions Unit: #2 Lime Kiln (P019)**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub> and with the allowable visible PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the following:
    - i. the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A;
    - ii. the allowable visible PE limitations: Method 9 of 40 CFR, Part 60, Appendix A; and
    - iii. the allowable mass emission rate for SO<sub>2</sub>: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
  - d. The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by

**Emissions Unit: #2 Lime Kiln (P019)**

the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s).

2. During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the pressure drop across the baghouse, in inches of water; and
  - b. the sulfur content of the coal and/or petroleum coke burned, in percent by weight.
3. Compliance with the emission limitations in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 79.9 pounds PE/hour (for emissions units P015 and P019 combined)

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1. and A.V.2.).

- c. Emission Limitation: 25.0 lbs SO<sub>2</sub>/ton of product

Applicable Compliance Method: The permittee shall demonstrate compliance with the SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1.). and the record keeping requirements in sections A.III.2 and 3 of this permit.

- d. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: #2 Lime Kiln (P019)**

**Emissions Unit: #2 Lime Kiln (P019)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Coal handling - south plant (P023)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Coal handling - south plant (P023)

**Activity Description:** Coal crushing and screening - south plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coal handling - south plant, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-31-05 (PTI #03-931)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(B)(1)	Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.a. and A.I.2.b.)

**Emissions Unit: Coal handling - south plant (P023)**

**2. Additional Terms and Conditions**

- a. The permittee shall employ reasonably available control measures (RACM) at all times for the control of fugitive dust emissions associated with this emissions unit. The following control techniques shall be implemented to reduce fugitive dust emissions:
  - i. the use of an enclosure (i.e., building enclosure) around the crushers, conveyors and bins and the use of hooding to minimize or eliminate visible PE of fugitive dust at the point(s) of capture\* to the extent possible with good engineering design; and
  - ii. all fugitive dust captured within the building enclosure shall be vented to baghouse #0839.

\* from the crushers, conveyors and bins
  
- b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emission limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to less than 10 pounds per hour.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not

**Emissions Unit: Coal handling - south plant (P023)**

have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**Emissions Unit: Coal handling - south plant (P023)**

- a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 10 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- c. Emission Limitation: Visible fugitive PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(3).

**VI Miscellaneous Requirements**

None

**Emissions Unit: Coal handling - south plant (P023)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime screening & briquetting - south plant  
(P027)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Lime screening & briquetting - south plant (P027)

**Activity Description:** Lime/DBD product processing - south plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
lime screening and briquetting - south plant, with 3 baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	6.16 lbs PE/hr (based on Figure II and an uncontrolled PE rate of 39.06 lbs/hr)

**2. Additional Terms and Conditions**

- a. All the PE from this emissions unit shall be vented to the baghouses.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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:

**Emissions Unit: Lime screening & briquetting - south plant  
(P027)**

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

**IV Reporting Requirements**

- 1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

- 1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation: Visible PE from the stacks shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 6.16 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Lime screening & briquetting - south plant (P027)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: MgO plant dryer (P029)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** MgO plant dryer (P029)

**Activity Description:** Filter cake dryer - MgO plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
MgO plant - filter cake dryer, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	9.13 lbs PE/hr (based on Figure II and an uncontrolled PE rate of 71.79 lbs/hr)
	OAC rule 3745-31-05 (PTI #03-952)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

**2. Additional Terms and Conditions**

- a. This emissions unit is not subject to the requirements of OAC rule 3745-17-10(B).
- b. All the PE from this emissions unit shall be vented to the baghouse.

**II Operational Restrictions**

None

**Emissions Unit: MgO plant dryer (P029)**

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:
  - a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission limitation: 9.13 lbs PE/hr  
  
Applicable compliance method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**Emissions Unit: MgO plant dryer (P029)**

**VI Miscellaneous Requirements**

None

**Emissions Unit: MgO plant dryer (P029)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: MgO plant calciner (P030)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** MgO plant calciner (P030)

**Activity Description:** Rotary calciner - MgO plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
MgO plant - rotary calciner, with baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	8.14 lbs PE/hr (based on Figure II and an uncontrolled PE rate of 60 lbs/hr)
	OAC rule 3745-31-05 (PTI #03-952)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), 3745-17-(10)(B), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-17-10(B)	0.02 lb PE/mmBtu of heat input (for the burning of natural gas)
	OAC rule 3745-21-08(B)	See A.I.2.c.

**Emissions Unit: MgO plant calciner (P030)**

**2. Additional Terms and Conditions**

- a. OAC rule 3745-18-06 does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel for burning.
- b. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 03-952.
- c. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-952.

**II Operational Restrictions**

1. The permittee shall only burn natural gas as fuel in this emissions unit

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type of fuel burned in this emissions unit.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and

**Emissions Unit: MgO plant calciner (P030)**

July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission limitation: 8.14 lbs PE/hr

Applicable compliance method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- c. Emission Limitation: 0.020 pound PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with the PE limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

If required, compliance with the lb PE/mmBtu allowable emission limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

**VI Miscellaneous Requirements**

None

**Emissions Unit: MgO plant calciner (P030)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

None

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

**Emissions Unit: MgO plant packaging system (P031)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** MgO plant packaging system (P031)

**Activity Description:** Pulverizer mill and bagging system - MgO plant

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
MgO plant packaging system, with 2 baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	10.0 lbs PE/hr (based on Figure II and an uncontrolled PE rate of 100 lbs/hr)
	OAC rule 3745-31-05 (PTI #03-4603)	0.030 grain per dry standard cubic foot of exhaust gases or no visible emissions from the exhaust stack  3.2 tons PE/year  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

**2. Additional Terms and Conditions**

- a. All the PE from this emissions unit shall be vented to the baghouses.

**II Operational Restrictions**

**Emissions Unit: MgO plant packaging system (P031)**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse 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. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as otherwise provided by rule.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).
  - b. Emission Limitation: 10.0 lbs PE/hr  

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

**Emissions Unit: MgO plant packaging system (P031)**

- c. Emission Limitation: 0.030 gr/dscf of exhaust

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

- d. Emission Limitation: no visible emissions from the exhaust stack

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible PE limitation above in accordance with the test method and procedures in Method 22 of 40 CFR Part 60, Appendix A.

- e. Emission Limitation: 3.2 tons PE/yr

Applicable Compliance Method: The permittee may demonstrate compliance with the annual PE limitation by multiplying the limitation of 0.030 gr PE/dscf by the maximum volumetric air flow (2,800 acfm), and by 7000 and by 60, and then by 8760.

**VI Miscellaneous Requirements**

None

**Emissions Unit: MgO plant packaging system (P031)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Refractory crushing, screening & storage (P032)

**Activity Description:** DBD processing

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
refractory crushing, screening, and storage - DBD processing, with baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	6.27 lbs PE/hr ( based on Figure II and an uncontrolled PE rate of 40.09 lbs/hr)

**2. Additional Terms and Conditions**

- a. All the PE from this emissions unit shall be vented to the baghouses.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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

**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

following in the operations log:

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

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 6.27 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
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**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

Applicable Emissions  
Limitations/Control  
Measures

**2. Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Record keeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Emissions Unit: Refractory crushing, screening & storage (P032)**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** Refractory crushing, screening & storage (P032)

**Activity Description:** DBD processing

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
refractory crushing, screening, and storage - DBD processing, with baghouses	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	6.27 lbs PE/hr ( based on Figure II and an uncontrolled PE rate of 40.09 lbs/hr)

2. **Additional Terms and Conditions**

- a. All the PE from this emissions unit shall be vented to the baghouses.

**II Operational Restrictions**

None

**III Monitoring and/or Record keeping**

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses 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

**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

following in the operations log:

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

**IV Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**V Testing Requirements**

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 6.27 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**VI Miscellaneous Requirements**

None

**Emissions Unit: Refractory crushing, screening & storage  
(P032)**

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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