



State of Ohio Environmental Protection Agency

Street Address:

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P.O. Box 1049  
Columbus, OH 43216-1049

02/28/01

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

03-72-00-0127  
MARTIN MARIETTA MAGNESIA SPECIALTIES INC.  
Don E. Kuk  
1800 Eastlake Road  
Manistee, MI 49660

Dear Don E. Kuk:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.**

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA  
Jim Orlemann, DAPC Engineering  
Michael Ahern, DAPC PMU  
Northwest District Office  
Michigan



## Ohio EPA

State of Ohio Environmental Protection Agency

### DRAFT TITLE V PERMIT

Issue Date: 02/28/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance to:

MARTIN MARIETTA MAGNESIA SPECIALTIES INC.

755 Lime Road

Woodville, OH 43469-9727

of a Title V permit for Facility ID: 03-72-00-0127

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

F002 (Storage piles, plant stockpiles)

Stockpiles

F003 (Lime transfer & storage - south plant)

Lime/DBD loadout spouts - south plant

F004 (Dust loadout system - south plant)

#1 & #2 kiln dust loadout - south plant

F005 (Stone crushing & screening - north plant)

Primary, secondary & tertiary crushing & screening - north plant

F006 (Dust loadout system - north plant)

400 & 500 ton dust bins - north plant

F007 (Lime loadout - north plant)

Railcar/truck lime loadout system - north plant

F008 (Mineral extraction, overburden removal)

Quarry extraction/drilling

P004 (Lime screening & briquetting - north plant)

Lime processing building - north plant

P010 (#5 Rotary Kiln)

Rotary lime kiln with multiclone & baghouse

P011 (Material handling, mixing and packing)

DBD Packhouse

P013 (#4 Rotary Kiln)

Rotary lime kiln with multiclone & baghouse

P014 (#6 Rotary Kiln)

Rotary lime kiln with multiclone & baghouse

P015 (#1 Lime Kiln)

Rotary lime kiln with multiclone & ESP

P019 (#2 Lime Kiln)

Rotary lime kiln with multiclone & baghouse

P029 (MgO plant dryer)

Filter cake dryer - MgO plant

P030 (MgO plant calciner)

Rotary calciner - MgO plant

P032 (Refractory crushing, screening & storage)

DBD processing

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 3745-77-04(A) 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

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Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. Monitoring and Related Recordkeeping 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.
- 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (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. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. These semi-

annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, 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.

- 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 are true, accurate, and complete.

## **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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

## **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.

## **5. Severability Clause**

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.

## **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. 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.

## **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.

## **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.

## **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.

## **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 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.

## **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.

## **12. Compliance Requirements**

- 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 appropriate Ohio EPA District Office or local air agency 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.
    - (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.

### **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.

#### **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).

#### **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.

#### **16. Off Permit Changes**

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, 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; and
- 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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## **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.

## **18. Insignificant Activity**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

## **B. State Only Enforceable Section**

### **1. 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.

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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.)

### **3. 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.

### **4. 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.

**5. 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).

**6. 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.

**7. 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.

**8. 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.

## **Part II - Specific Facility Terms and Conditions**

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

**None**

### **B. State Only Enforceable Section**

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

K001 - Paint spray booth - product application center  
P008 - Coal pulverizers - north plant  
P018 - Stone plant  
P023 - Coal handling - south plant  
P028 - MgO plant pneumatic unloading system  
P031 - MgO plant packaging system  
P033 - DBD processing  
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.

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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.1.2.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.2.c, and A.2.f through A.2.j)
unpaved roadways and parking areas (see section A.1.2.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.2.d through A.2.i)

##### 2. Additional Terms and Conditions

- 2.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

- 2.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

## **2. Additional Terms and Conditions (continued)**

- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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.
- 2.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 Requirements**

- 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- daily  
paved, asphalt parking
- 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 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.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, 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 determined in accordance with the following method:
  - 1.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 method to be employed to demonstrate compliance with the VE limitation shall be OAC rule 3745-17-03(B)(4).
  - 1.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 method to be employed to demonstrate compliance with the VE limitation shall be OAC rule 3745-17-03(B)(4).

### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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.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
	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.2.b, A.2.c and A.2.f)
wind erosion from storage piles (see section A.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
	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.2.d through A.2.f)

##### 2. Additional Terms and Conditions

- 2.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
- 2.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.

## 2. Additional Terms and Conditions (continued)

- 2.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.
- 2.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.
- 2.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.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:  
storage pile identification: minimum load-in inspection frequency:  
aggregate products, by- daily  
products, fuels
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- daily  
products, fuels
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- daily  
products, fuels
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.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, 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.
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:
  - 1.a 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 method to be employed to demonstrate compliance with the VE limitation shall be OAC rule 3745-17-03(B)(4).

### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 twenty percent opacity, as a three-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

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2 - 6 inches of water while the emissions unit is in operation.

##### III. Monitoring and/or Record Keeping Requirements

- 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 once per shift basis.
- The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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:
  - the location and color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of each visible emission incident; and
  - 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 semiannual written reports which (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:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(3).

- 1.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:

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

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 (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 method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(10).

- 1.c Emission Limitation:

no visible emissions

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to 40 CFR Part 60, Appendix A, Method 22.

#### VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 twenty percent opacity as a three-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

##### 2. Additional Terms and Conditions

**None**

##### II. Operational Restrictions

1. The pressure drop across baghouses #1044 and #1045 shall be maintained within the following ranges, while the emissions unit is in operation:
  - a. baghouse #1044: 2 - 6 inches of water; and
  - b. baghouse #1045: 2 - 6 inches of water.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouses 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 once per shift basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 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 each 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 either baghouse did not comply with the allowable ranges 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 semiannual written reports which (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:

**1.a** Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, the method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(3).

**1.b** 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 (3,488 scfm)

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

If required, the method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(10).

**1.c** Emission Limitation:

no visible emissions

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to 40 CFR Part 60, Appendix A, Method 22.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
700 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 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)

##### 2. Additional Terms and Conditions

**2.a** The following transfer points, screens, and storage bins are subject to 40 CFR Part 60, Subpart OOO:

- 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.

## **2. Additional Terms and Conditions (continued)**

- 2.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.
- 2.c** 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.
- 2.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.
- 2.e** The following crusher is limited to 15% opacity: 32-0459.

## **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 Requirements**

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 daily 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 daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from 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 location 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 each visible emission incident; and
  - e. any corrective actions taken to eliminate the 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.

#### **IV. Reporting Requirements (continued)**

- 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 which (a) identify all days during which any visible particulate emissions were observed from the 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:
  - 1.a** Emission Limitation: 10% opacity (from specific transfer points, screens and storage bins)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance pursuant to Method 9 of 40 CFR Part 60, Appendix A.
  - 1.b** Emission Limitation: 20% opacity (from specific transfer points, screens and storage bins), as a 3-minute average  
  
Applicable Compliance Method: If required, the method to be employed to demonstrate compliance with the VE limitation shall be OAC 3745-17-03(B).
  - 1.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.
  - 1.d** Emission Limitation: 10% opacity (from specific transfer points, screens and storage bins)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance pursuant to Method 9 of 40 CFR Part 60, Appendix A.
  - 1.e** Emission Limitation: 15% opacity (from specific crushers)  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance pursuant to Method 9 of 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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)	Visible particulate emissions shall not exceed twenty percent opacity, as a three-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

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 - 8 inches of water while the emissions unit is in operation.

##### III. Monitoring and/or Record Keeping Requirements

- 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 once per shift basis.
- The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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:
  - the location and color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of each visible emission incident; and
  - 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 semiannual written reports which (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:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(3).

- 1.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)

\* 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 method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(10).

- 1.c Emission Limitation:

no visible emissions

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to 40 CFR Part 60, Appendix A, Method 22.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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)	Visible particulate emissions shall not exceed twenty percent opacity, as a three-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

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 - 8 inches of water while the emissions unit is in operation.

##### III. Monitoring and/or Record Keeping Requirements

- 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 once per shift basis.
- The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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:
  - the location and color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of each visible emission incident; and
  - 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 semiannual written reports which (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:

- 1.a Emission Limitation:  
Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(3).

- 1.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 (40 tons/hr) x 0.00013 (lb/ton)\*

F = flow rate of exhaust system (21,780 scfm)

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

If required, the method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(10).

- 1.c Emission Limitation:  
no visible emissions

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to 40 CFR Part 60, Appendix A, Method 22.

#### VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
drilling, with baghouse	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average.
	OAC rule 3745-17-08(B)(3)(b)	0.030 grain per dry standard cubic foot or no visible emissions from stack, whichever is less stringent (see A.I.2.a.i)
overburden removal	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent 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.a.ii)
blasting	OAC rule 3745-17-07(B)	See A.I.2.a.iii.
	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.iii)
truck unloading	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent 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.a.iv)

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
waste disposal	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average.
reclamation	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.v)
reclamation	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average.
reclamation	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.vi)

**2. Additional Terms and Conditions**

- 2.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:

## 2. Additional Terms and Conditions (continued)

### 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. When drilling occurs, there shall be no visible fugitive emissions and the baghouse 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 (i.e., strip land surface only once every three years) and perform the overburden removal 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.

### v. Waste disposal:

Minimize the disturbance of the land surface (i.e., strip land surface only once every three years) and perform the waste disposal 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

1. The pressure drop across the baghouse used in the drilling operation shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

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 once per shift basis.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Except as otherwise provided in this section, for mineral extraction operations, the permittee shall perform inspections of such operations 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

3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, 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.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from 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:
- the location of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of each visible emission incident; and
  - 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.2 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 semiannual written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from the 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:
- 1.a Emission Limitation: Visible particulate emissions shall not exceed twenty percent opacity, as a three-minute average.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(3).

## V. Testing Requirements (continued)

**1.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 process weight rate (0.5 ton/hr) x 0.00008 (lb/ton)\* x 0.01\*\*

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

\* emission factor from AP-42, Chapter 11.19

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

If required, the method to be employed to demonstrate compliance with the emission limitation shall be OAC rule 3745-17-03(B)(10).

**1.c** Emission Limitation:  
no visible emissions

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to 40 CFR Part 60, Appendix A, Method 22.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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) from the stacks shall not exceed twenty percent opacity, as a six-minute average, except as otherwise 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(A)(3).
	OAC rule 3745-31-05 (PIT #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

**None**

##### II. Operational Restrictions

1. The pressure drop across the following baghouses shall be maintained within the following ranges, in inches of water, while the emissions unit is in operation:
  - a. baghouse # 0776: 4 to 8;
  - b. baghouse #0777: 4 to 8;
  - c. baghouse #0778: 4 to 8;
  - d. baghouse #0779: 4 to 8;
  - e. baghouse #0780: 4 to 8;
  - f. baghouse #0884: 4 to 8;
  - g. baghouse #1027: 2.3 to 2.6; and
  - h. baghouse #0715: 2 to 6.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the baghouses 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 each of the baghouses on a daily basis.

### 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 each 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.

### V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
  - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A.
  - 1.d The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

3. Compliance Methods Requirements: Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:
  - 3.a Emission Limitation:  
Visible particulate emissions from the stacks shall not exceed twenty percent opacity, as a six-minute average, except as otherwise provided by rule.  
  
Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).
  - 3.b Emission Limitation:  
1.5 lbs PE/hr  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 3745-17-11(B)	50.6 pounds particulate emissions (PE)/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	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

**2. Additional Terms and Conditions**

- 2.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 50.6 pounds/hour.

**II. Operational Restrictions**

1. The pressure drop across each of the 22 baghouse compartments shall be maintained within the range of 1 to 10 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal in this emissions unit.
3. The quality of coal 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.

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse compartment 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 each of the baghouse compartments on a daily basis.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall each be combined (in proportion to the amount of coal received in each shipment) into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The permittee shall perform or require the supplier to perform the coal sampling in accordance with the most recent version of the following ASTM methods: ASTM method D2234, Collection of a Gross Sample of Coal and/or Petroleum Coke and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall maintain monthly records of the total quantity of coal received in each shipment and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 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 each 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 any baghouse compartment 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 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 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 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. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports which (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. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

**V. Testing Requirements (continued)**

- 1.a** The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
- 1.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
- 1.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
  - ii. for SO<sub>2</sub>: Method 6 of 40 CFR Part 60, Appendix A.
- 1.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 appropriate Ohio EPA District Office or local air agency.
- 2.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

- 3.** During the emission testing of this emissions unit, the following additional information shall be recorded:
- i. the pressure drop across each of the baghouse compartments, in inches water;
  - ii. the process weight rate input, in tons;
  - iii. the tons of product produced; and
  - iv. the sulfur content of the coal burned, in percent by weight.
- 4.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
- 4.a** Emission Limitation:  
50.6 pounds PE/hour (from units P010, P013 and P014, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit.
- 4.b** Emission Limitation:  
Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
- Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

**4.c** 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 this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**4.d** Emission Limitation:  
25.0 pounds of SO<sub>2</sub>/ton of product

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 PE from the stacks shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-11(B)	30.4 lbs particulate emissions (PE)/hr

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

1. The pressure drop across the baghouses shall be maintained within the following ranges, in inches of water, while the emissions unit is in operation:
  - a. baghouse #0718: 4 to 8;
  - b. baghouse #0719: 4 to 8; and
  - c. baghouse #1035: 2 to 6.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouses 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 each of the baghouses on a daily basis.

##### 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 each 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.

## V. Testing Requirements

1. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
  - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A.
  - 1.d The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

- 3.b Emission Limitation:  
30.4 lbs PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 3745-17-11(B)	50.6 pounds particulate emissions (PE)/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	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

**2. Additional Terms and Conditions**

- 2.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 50.6 pounds/hour.

**II. Operational Restrictions**

1. The pressure drop across each of the 22 baghouse compartments shall be maintained within the range of 1 to 10 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal in this emissions unit.
3. The quality of coal 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.

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse compartment 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 each of the baghouse compartments on a daily basis.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall each be combined (in proportion to the amount of coal received in each shipment) into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The permittee shall perform or require the supplier to perform the coal sampling in accordance with the most recent version of the following ASTM methods: ASTM method D2234, Collection of a Gross Sample of Coal and/or Petroleum Coke and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall maintain monthly records of the total quantity of coal received in each shipment and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 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 each 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 any baghouse compartment 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 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 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 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. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports which (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. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

**V. Testing Requirements (continued)**

- 1.a** The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
- 1.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
- 1.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
  - i. for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
  - ii. for SO<sub>2</sub>: Method 6 of 40 CFR Part 60, Appendix A.
- 1.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 appropriate Ohio EPA District Office or local air agency.
- 2.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

- 3.** During the emission testing of this emissions unit, the following additional information shall be recorded:
  - i. the pressure drop across each of the baghouse compartments, in inches water;
  - ii. the process weight rate input, in tons;
  - iii. the tons of product produced; and
  - iv. the sulfur content of the coal burned, in percent by weight.
- 4.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
  - 4.a** Emission Limitation:  
50.6 pounds PE/hour (from units P010, P013 and P014, combined)  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit.
  - 4.b** Emission Limitation:  
Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

**4.c** 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 this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**4.d** Emission Limitation:  
25.0 pounds of SO<sub>2</sub>/ton of product

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 3745-17-11(B)	50.6 pounds particulate emissions (PE)/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	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

##### 2. Additional Terms and Conditions

- 2.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 50.6 pounds/hour.

##### II. Operational Restrictions

1. The pressure drop across each of the 22 baghouse compartments shall be maintained within the range of 1 to 10 inches of water while the emissions units are in operation.
2. The permittee shall burn only coal in this emissions unit.
3. The quality of coal 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.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse compartment 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 each of the baghouse compartments on a daily basis.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall each be combined (in proportion to the amount of coal received in each shipment) into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The permittee shall perform or require the supplier to perform the coal sampling in accordance with the most recent version of the following ASTM methods: ASTM method D2234, Collection of a Gross Sample of Coal and/or Petroleum Coke and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall maintain monthly records of the total quantity of coal received in each shipment and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 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 each 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 any baghouse compartment 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 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 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 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. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports which (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. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

**V. Testing Requirements (continued)**

- 1.a** The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
- 1.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
- 1.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
  - ii. for SO<sub>2</sub>: Method 6 of 40 CFR Part 60, Appendix A.
- 1.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 appropriate Ohio EPA District Office or local air agency.
- 2.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

- 3.** During the emission testing of this emissions unit, the following additional information shall be recorded:
- i. the pressure drop across each of the baghouse compartments, in inches water;
  - ii. the process weight rate input, in tons;
  - iii. the tons of product produced; and
  - iv. the sulfur content of the coal burned, in percent by weight.
- 4.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
- 4.a** Emission Limitation:  
50.6 pounds PE/hour (from units P010, P013 and P014, combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit.
- 4.b** Emission Limitation:  
Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

**4.c** 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 this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**4.d** Emission Limitation:  
25.0 pounds of SO<sub>2</sub>/ton of product

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 3745-17-11(B)	41.1 pounds particulate emissions (PE)/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-18-06(E)	192.3 lbs sulfur dioxide (SO <sub>2</sub> )/hr

##### 2. Additional Terms and Conditions

- In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions units P015 and P019, combined, shall not exceed 41.1 pounds/hour.

##### II. Operational Restrictions

- The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, measured during the most recent emission testing that demonstrated the emissions unit was in compliance with the particulates emission limitation.
- The permittee shall burn only coal in this emissions unit.
- The quality of coal 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 192.3 lbs SO<sub>2</sub>/hr.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the secondary voltage, in kilovolts and the secondary current, in amps, in all fields of the ESP while the emissions unit is in operation. The secondary voltage and secondary current monitors shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

- a. the secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
  - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and
  - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
2. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall each be combined (in proportion to the amount of coal received in each shipment) into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The permittee shall perform or require the supplier to perform the coal sampling in accordance with the most recent version of the following ASTM methods: ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall maintain monthly records of the total quantity of coal received in each shipment and the results of the analyses for sulfur content and heat content.
4. The permittee shall record the following information for each day:
  - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
  - b. the duration of the downtime for the ESP sections that are out of service and the duration of the downtime for each section, when the associated emissions unit was in operation.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the ESP 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 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 each visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal 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 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 192.3 lbs SO<sub>2</sub>/hr. The notification shall include a copy of such record and shall be sent to the Director within 45 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP did not comply with the operational restriction specified in section A.II. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
4. 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.
5. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the ESP 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. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
  - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
    - ii. for SO<sub>2</sub>: Method 6 of 40 CFR Part 60, Appendix A.
  - 1.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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

## **V. Testing Requirements (continued)**

- 3.** During the emission testing of this emissions unit, the following additional information shall be recorded:
  - a. the sulfur content of the coal burned, in percent by weight; and
  - b. the power input, in kilowatts, of each TR set.
- 4.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
  - 4.a** Emission Limitation:  
41.1 pounds PE/hour (for emissions units P015 and P019, combined)  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.
  - 4.b** Emission Limitation:  
Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.  
  
Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).
  - 4.c** Emission Limitation:  
192.3 lbs SO<sub>2</sub>/hr  
  
Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures as specified in section A.V.1 of the terms and conditions of this permit.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 3745-17-11(B)	41.1 pounds particulate emissions (PE)/hour (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-18-06(E)	208 lbs sulfur dioxide (SO <sub>2</sub> )/hr

##### 2. Additional Terms and Conditions

- In accordance with the provisions of OAC rule 3745-17-11(A)(3), the PE from emissions units P015 and P019, combined, shall not exceed 41.1 pounds/hour.

##### II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 to 14 inches of water while the emissions units are in operation.
- The permittee shall burn only coal in this emissions unit.
- The quality of coal 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 208 lbs SO<sub>2</sub>/hr.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse compartments 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 each of the baghouse compartments on a daily basis.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall each be combined (in proportion to the amount of coal received in each shipment) into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The permittee shall perform or require the supplier to perform the coal sampling in accordance with the most recent version of the following ASTM methods: ASTM method D2234, Collection of a Gross Sample of Coal and analyze the coal sample for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

3. The permittee shall maintain monthly records of the total quantity of coal received in each shipment and the results of the analyses for sulfur content and heat content.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the 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 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 each 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 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 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 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 208 lbs SO<sub>2</sub>/hr. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.
4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from baghouse serving this the 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. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

## V. Testing Requirements (continued)

- 1.a** The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
- 1.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
- 1.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A; and
  - ii. for SO<sub>2</sub>: Method 6 of 40 CFR Part 60, Appendix A.
- 1.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 appropriate Ohio EPA District Office or local air agency.
- 2.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

- 3.** During the emission testing of this emissions unit, the following additional information shall be recorded:
- i. the pressure drop across the baghouse, in inches of water; and
  - ii. the sulfur content of the coal burned, in percent by weight.
- 4.** Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
- 4.a** Emission Limitation:  
41.1 pounds PE/hour (for emissions units P015 and P019 combined)
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit.
- 4.b** Emission Limitation:  
Visible PE from the stack shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.
- Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

**4.c** Emission Limitation:  
208 lbs SO<sub>2</sub>/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures specified in section A.V.1 of the terms and conditions of this permit and the record keeping requirements in sections A.III.2 and 3 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 from the stack shall not exceed 20% percent opacity, as a six-minute average, except as otherwise 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(A)(3).
	OAC rule 3745-31-05 (PTI #03-952)	5.0 lbs particulate emissions (PE)/hr (see A.I.2.a)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units P029 and P030, combined, shall not exceed 5.0 pounds/hour.

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within 4 to 8 inches of water, while the emissions unit is in operation.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouses 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 baghouses on a daily basis.

#### **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.

#### **V. Testing Requirements**

1. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
  - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A.
  - 1.d The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

3. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:
  - 3.a Emission Limitation:  
Visible particulate emissions from the stack shall not exceed 20% percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

- 3.b Emission limitation:  
5.0 lbs PE/hr

Applicable compliance method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures as specified in section A.V.1 of the terms and conditions of this permit.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 from the stack shall not exceed 20% percent opacity, as a six-minute average, except as otherwise 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(A)(3).
	OAC rule 3745-31-05 (PTI #03-952)	5.0 lbs particulate emissions (PE)/hr (see A.I.2.a)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units P029 and P030, combined, shall not exceed 5.0 pounds/hour.

##### II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within 4 to 8 inches of water, while the emissions unit is in operation.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouses 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 baghouses on a daily basis.

#### **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.

#### **V. Testing Requirements**

1. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
  - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
  - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A.
  - 1.d The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

3. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method:
  - 3.a Emission Limitation:  
Visible particulate emissions from the stack shall not exceed 20% percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

- 3.b Emission limitation:  
5.0 lbs PE/hr

Applicable compliance method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures as specified in section A.V.1 of the terms and conditions of this permit.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

## Part III - Terms and Conditions for Emissions Units

**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 operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 from the stack shall not exceed twenty percent opacity, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-11(B)	23.5 lbs particulate emissions (PE)/hr

#### 2. Additional Terms and Conditions

None

#### II. Operational Restrictions

1. The pressure drop across the following baghouses shall be maintained within the following ranges, in inches of water, while the emissions unit is in operation:
  - a. baghouse #0716: 4 to 8; and
  - b. baghouse #0720: 4 to 8.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the baghouses 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 each of the baghouses on a daily basis.

#### 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 each 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.

#### V. Testing Requirements

1. Emissions Testing Requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

## V. Testing Requirements (continued)

- 1.a The emission testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration.
- 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
- 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for PE: Methods 1 - 5 of 40 CFR Part 60, Appendix A.
- 1.d The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

3. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
  - 3.a Emission Limitation:  
Visible particulate emissions from the stack shall not exceed twenty percent opacity as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance pursuant to the methods specified in OAC rule 3745-17-03(B)(1).

- 3.b Emission Limitation:  
23.5 lbs PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of emission testing conducted in accordance with the methods and procedures as specified in section A.V.1 of the terms and conditions of this permit.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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