



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
SENECA COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 03-13527

DATE: 5/23/2002

Ohio Lime Inc
Steve Brookshaw
PO Box 708
Bettsville, OH 44815

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: USEPA

NWDO



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 03-13527

Application Number: 03-13527
APS Premise Number: 0374000010
Permit Fee: **\$22400**
Name of Facility: Ohio Lime Inc
Person to Contact: Steve Brookshaw
Address: PO Box 708
Bettsville, OH 44815

Location of proposed air contaminant source(s) [emissions unit(s)]:
1967 County Road 42
Bettsville, Ohio

Description of proposed emissions unit(s):
Lime plant with two rotary kilns, raw material and product handling, and roadways.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

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, 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.
- 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 of federally enforceable 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 made to the appropriate Ohio EPA District Office or local air agency. 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. See B.10 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. 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 shall be submitted pursuant to 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 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

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- 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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. 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.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
 - 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.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or

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modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

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 of state-only enforceable 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 state-only required 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. 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.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the

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facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. **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.

C. **Permit To Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
fug PE	15.43
fug PM ₁₀	5.89
stack PM ₁₀	156.41
NO _x	4745.12
SO ₂	2896.92
CO	2372.46
VOC	142.34
Lead	0.04

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-08 (A)
F001 - Roadways and Parking Areas.	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-07 (B)(1)
Paved Roadways and Parking Areas (see A.I.2.a)	OAC rule 3745-31-05 (A)(3)	
Unpaved Roadways and Parking Areas (see A.I.2.b)	OAC rule 3745-31-05 (A)(3)	
	40 CFR 52.21	
	OAC rule 3745-31-10 through 20	

Applicable Emissions
Limitations/Control
Measures

See A.I.2.k.

5.70 tons particulate
emissions (PE)/yr

1.14 tons particulate matter
less than 10 microns in size
(PM₁₀)/yr

no visible particulate
emissions except for one
minute during any 60-minute
period

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.c, and
A.I.2.e through A.I.2.i)

no visible particulate
emissions except for 3
minutes during any
60-minute period

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.d through
A.I.2.i)

See A.I.2.l.

See A.I.2.m.

See A.I.2.j.

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Issued: 5/23/2002

Emissions Unit ID: F001

2. Additional Terms and Conditions

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

paved roadways:

all paved roadways

paved parking areas:

all paved parking areas

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

unpaved roadways:

all unpaved roadways

unpaved parking areas:

all unpaved parking areas

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved 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.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's 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.

Emissions Unit ID: F001

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 best available technology requirements of OAC rule 3745-31-05.
- 2.j** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.k** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.l** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.m** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be water application.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

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Ohio I

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Issued: 5/23/2002

Emissions Unit ID: F001

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

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

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

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
5.70 tons PE/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance by applying a 90% control efficiency for dust suppression to a maximum potential uncontrolled emission rate of 56.54 TPY PE. Compliance shall be demonstrated through the monitoring and recordkeeping requirements in Section A.III. of this permit.
 - b. Emission Limitation:
1.14 tons PE/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance by applying a 90% control efficiency for dust suppression to a maximum potential uncontrolled emission rate of 11.37 TPY PE. Compliance shall be demonstrated through the monitoring and recordkeeping requirements in Section A.III. of this permit.
 - c. Emission Limitation Method:
There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.

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

d. Emission Limitation Method:

There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Roadways and Parking Areas.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
F002 - Material Storage Piles.	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-08 (A)
Load-in and Load-out of Storage Piles (See A.I.2.a. for identification of storage piles)	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-07 (B)(1)
Wind Erosion from Storage Piles (See A.I.2.a. for identification of storage piles)	OAC rule 3745-31-05 (A)(3)	
	40 CFR Part 52.21	

Applicable Emissions Limitations/Control Measures	See A.I.2.g.
0.61 ton particulate emissions (PE)/yr	See A.I.2.h.
0.40 ton particulate matter less than 10 microns in size (PM ₁₀)/yr	
No visible emissions except for a period of time not to exceed one minute during any 60-minute observation period.	
Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b., A.I.2.c., and A.I.2.f.)	
No visible emissions except for a period of time not to exceed one minute during any 60-minute observation period.	
Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.d. through A.I.2.f.)	
See A.I.2.i.	
See A.I.2.j.	

2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:

storage pile identification:

all storage piles

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the storage piles with the following methods in order to ensure compliance:

- i. Limestone: water application at F003 - Limestone Material Handling;
- ii. Coal/Coke: no control; and
- iii. Lime Kiln Dust: water application (complete saturation) at P905 - Kiln Dust Handling.

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

- 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 best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the storage piles with the following methods in order to ensure compliance:

- i. Limestone: water application at F003 - Limestone Material Handling;

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- ii. Coal/Coke: no control; and
- iii. Lime Kiln Dust: water application (complete saturation) at P905 - Kiln Dust Handling.

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 3745-31-05 (A)(3).
- 2.g Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.h This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.j The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be the following:
 - i. Limestone Storage Piles: water application;
 - ii. Coal/Coke Storage Piles: low drop height; and
 - iii. Lime Kiln Dust Storage Piles: partial covering and water application (saturation).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each

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load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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all storage piles	daily
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2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

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

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

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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all storage piles	daily
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4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the 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 in accordance with the general terms and conditions of this permit 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.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.61 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by combining the annual fugitive emissions from the Limestone, Coal/Coke, and Lime Kiln Dust storage piles, where:

Limestone = the maximum potential uncontrolled emission rate of 0.5 TPY PE with an applied 75% control efficiency for dust suppression;

Coal/Coke = the maximum potential uncontrolled emission rate of 0.466 TPY PE;
and

Lime Kiln Dust = the maximum potential uncontrolled emission rate of 2.689 TPY PE
with an applied 99% control efficiency for dust suppression.

Compliance shall be demonstrated through the monitoring and recordkeeping requirements specified in Section A.III. of this permit.

- b. Emission Limitation:
0.40 ton PM₁₀/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by combining the annual PM₁₀ fugitive emissions from the Limestone, Coal/Coke, and Lime Kiln Dust storage piles, where:

Limestone = the maximum potential uncontrolled emission rate of 0.36 TPY PM₁₀
with an applied 75% control efficiency for dust suppression;

Coal/Coke = the maximum potential uncontrolled emission rate of 0.29 TPY
PM₁₀; and

Lime Kiln Dust = the maximum potential uncontrolled emission rate of 1.645 TPY
PM₁₀ with an applied 99% control efficiency for dust suppression.

Compliance shall be demonstrated through the monitoring and recordkeeping requirements specified in Section A.III. of this permit.

- c. Emission Limitation:
There shall be no visible particulate emissions from the load-in and load-out operations of the storage piles except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

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

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- d. Emission Limitation:
There shall be no visible particulate emissions from wind erosion of the storage piles except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Material Storage Piles.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Limestone Material Handling.	OAC rule 3745-31-05 (A)(3)	4.34 tons particulate emissions (PE)/yr 2.10 tons particulate matter less than 10 microns in size (PM ₁₀)/yr best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.b. through A.I.2.d.)
	40 CFR Part 52.21	See A.I.2.g.
	OAC rule 3745-31-10 through 20	See A.I.2.h.
	OAC rule 3745-17-08 (A)	See A.I.2.e.
	OAC rule 3745-17-07 (B)(1)	See A.I.2.f.
	40 CFR Part 60, Subpart OOO	no visible emissions from building enclosures (See A.I.2.d.)

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10% opacity from transfer
points and screening
operations (See A.I.2.d.)

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Limestone Material Handling

- 2.b** For each material handling operation that is not adequately enclosed, the control measure(s), identified in A.I.2.d. shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.c** Implementation of the control measure(s), identified in A.I.2.d., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.d** Visible particulate emissions from the limestone material handling operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	Control Measures in accordance with NSPS, Subpart 000	Opacity Limit	Regulatory Basis for Opacity Limit
limestone storage pile to C-108	transfer point	total enclosure	no visible emissions	NSPS, Subpart 000
C-108 to C-111	transfer point	water	10%	NSPS, Subpart 000
front end loader to N-109	transfer point	water	10%	NSPS, Subpart 000
-109 (hopper) to C-109	transfer point	water	10%	NSPS, Subpart 000
C-109 to C-111	transfer point	water	10%	NSPS, Subpart 000
C-111 to S-111 or C-113	transfer point	water	10%	NSPS, Subpart 000
S-111 to S-112	transfer point	water	10%	NSPS, Subpart 000
S-111 to C-113	transfer point	water	10%	NSPS, Subpart 000

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S-111 to C-114	transfer point	water	10%	NSPS, Subpart OOO
S-112 to C-112	transfer point	water	10%	NSPS, Subpart OOO
S-112 to C-113	transfer point	water	10%	NSPS, Subpart OOO
S-112 to C-114	transfer point	water	10%	NSPS, Subpart OOO
C-114 to C-115	transfer point	water	10%	NSPS, Subpart OOO
Screen 111	screen	water	10%	NSPS, Subpart OOO
Screen 112	screen	water	10%	NSPS, Subpart OOO
C-113 to C-116	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO
C-116 to C-117	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO
C-117 to T-118	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO
C-118 to T218	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO
T-118 to C-119	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO
T-218 to C-219	transfer point	building enclosure/water	no visible emissions	NSPS, Subpart OOO

- 2.e** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.f** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO, 40 CFR Part 52.12, and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be a building enclosure and/or water application (see A.I.2.d.).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not

adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
all material handling operations that are not adequately enclosed	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
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;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the enclosed transfer points of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;

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

IV. Reporting Requirements

- 1. The permittee shall submit deviation reports, in accordance with the reporting requirements of the General Terms and Conditions of this permit, that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- 2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions from the enclosed transfer points of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
4.34 tons PE/yr
 - Applicable Compliance Method:
The permittee shall demonstrate compliance by combining the annual fugitive emissions from the transfer points and screening operations of this emissions unit (see A.I.2.d.), at the maximum operating schedule of 8760 hrs/yr where:

transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with the following control efficiencies:

Best Available Control Measures under BAT	Control Efficiency
watering	75%

building enclosure/watering	98.75%
total enclosure	100%

screening = the appropriate emission factors from AP-42 Chapter 11.19.2 (1/95) multiplied by the maximum throughput with an applied 75% control efficiency.

Compliance shall be demonstrated through the monitoring and recordkeeping requirements specified in Section A.III. of this permit.

- b. Emission Limitation:
2.10 tons PM₁₀/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by combining the annual fugitive emissions from the transfer points and screening operations of this emissions unit (see A.I.2.d.), at the maximum operating schedule of 8760 hrs/yr where:

transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with the following control efficiencies:

Best Available Control Measures under BAT	Control Efficiency
watering	75%
building enclosure/watering	98.75%
total enclosure	100%

screening = the appropriate emission factors from AP-42 Chapter 11.19.2 (1/95) multiplied by the maximum throughput with an applied 75% control efficiency.

- c. Emission Limitation:
no visible emissions from building enclosures

Applicable Compliance Method:

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

- d. Emission Limitation:
10% opacity from transfer points and screening operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

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Facility ID: **0374000010**

Emissions Unit ID: F003

2. The permittee shall conduct, or have conducted, emission testing for all transfer points and screening operations of emissions unit F003.

Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, Section 60.8 and 40 CFR Part 60, Subpart OOO, Section 60.675.

The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.

Method 9 of 40 CFR, Part 60, Appendix A shall be the test method employed to demonstrate compliance with the allowable visible emission rates.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio Environmental Protection Agency, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio Environmental Protection Agency, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Ohio Environmental Protection Agency, Northwest District Office, Division of Air Pollution Control within 30 days following completion of the tests.

VI. Miscellaneous Requirements

NSPS Requirements

1. Emissions unit F003 is subject to Subpart OOO of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of the standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirements to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and,

Ohio EPA, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Limestone Material Handling.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Product Handling #1/Lime Material Handling.	OAC rule 3745-31-05 (A)(3)	Use of building enclosure vented to baghouse (see A.I.2.a.)
		1.05 lbs particulate emissions (PE)/hr 4.60 tons PE/yr (see A.I.2.f.)
		0.01 gr PE/dscf
		no visible emissions from building enclosures (see A.I.2.b.)
		7% opacity from stack emissions (see A.I.2.b.)
	40 CFR Part 52.21	See A.I.2.d.
	OAC rule 3745-31-10 through 20	See A.I.2.e.
	OAC rule 3745-17-11 (B)	See A.I.2.c.
	OAC rule 3745-17-07 (A)	See A.I.2.c.

2. Additional Terms and Conditions

- 2.a** Best available technology (BAT) for this emissions unit has been determined to be use of total building enclosure vented to a baghouse with a maximum outlet concentration of 0.01 gr/dscf (See A.I.2.b.).
- 2.b** Visible particulate emissions and BAT requirements for the material handling operation shall comply with the following:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
C-135.1 to E-136	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-136 to C-136.1	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-136 to C-136.2	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-136.1 to T-136 (6E, 7W, 8W, 9E, 10W)	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-136.1 to T-136 (1E, 2W, 3W, 4E, 5W)	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-117 to C-118	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building

- 2.c** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.d** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.e** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf.
- 2.f** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM₁₀).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop range applies at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop range shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouse in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual deviation (excursion) reports that identify any exceedances of the hourly emission limitations specified in Section A.I.1. These reports shall be submitted by

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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 the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:
1.05 lbs particulate emissions (PE)/hr
4.60 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (12304 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- b. Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance using the manufacturer's guaranteed outlet grain loading concentration. The permittee shall demonstrate compliance with this emission limitation by the testing requirements specified in A.V.2.

- c. Emission Limitation:
no visible emissions from building enclosures

Applicable Compliance Method:

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

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- d. Emission Limitation:
7% opacity from stack emissions

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Emissions Unit ID: P001

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Product Handling #1/Lime Material Handling.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Product Handling #2/Lime Material Handling.	OAC rule 3745-31-05 (A)(3)	Use of building enclosure vented to baghouse (see A.I.2.a.) 1.38 lbs particulate emissions (PE)/hr 6.04 tons PE/yr (see A.I.2.f.) 0.01 gr PE/dscf no visible emissions from building enclosures (see A.I.2.b.) 7% opacity from stack emissions (see A.I.2.b.)
	40 CFR Part 52.21	See A.I.2.d.
	OAC rule 3745-31-10 through 20	See A.I.2.e.
	OAC rule 3745-17-11 (B)	See A.I.2.c.
	OAC rule 3745-17-07 (A)	See A.I.2.c.

2. Additional Terms and Conditions

- 2.a** Best available technology (BAT) for this emissions unit has been determined to be use of total building enclosure vented to a baghouse with a maximum outlet concentration of 0.01 gr/dscf (See A.I.2.b.).
- 2.b** Visible particulate emissions and BAT requirements for the material handling operation shall comply with the following:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
C-141 to S-141	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-141 to C-143	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-141 to T-141	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-141 to C-142	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-141 to T-151	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-143 to T-144 or T-143	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-142 to T-143 or T-142	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-152 to T-151	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-151 to S-151	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-151 to C-142 or T-151	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
R-151 and -152 to C154	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building

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T-151 to C-165	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-141 to C-165	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-141	screen	building enclosure and baghouse	7%-stack no visible emissions from building
S-151	screen	building enclosure and baghouse	7%-stack no visible emissions from building

- 2.c** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.d** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.e** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf.
- 2.f** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop range applies at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop range shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouse in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

- The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
- The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and screening operations of this emissions unit. The presence or absence of any

visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points and screening operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual deviation (excursion) reports that identify any exceedances of the hourly emission limitations specified in Section A.I.1. These reports shall be submitted 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.38 lbs particulate emissions (PE)/hr
6.04 tons PE/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow

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(16089 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- b. Emission Limitation:
 0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

- c. Emission Limitation:
 no visible emissions from building enclosures

Applicable Compliance Method:

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

- d. Emission Limitation:
 7% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Product Handling #2/Lime Material Handling.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P003 - Rotary Kiln #12 (formerly permitted as P004, see A.I.2.c.).	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-31-10 through 20 OAC rule 3745-18-80 (B) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)
	40 CFR Part 52.21	

Applicable Emissions
Limitations/Control
Measures

14.23 lbs particulate
emissions (PE)/hr
62.33 tons PE/yr
(see A.I.2.a.)

0.021 gr PE/dscf

541.68 lbs nitrogen oxides
(NO_x)/hr
2372.56 tons NO_x/yr

330.70 lbs sulfur dioxide
(SO₂)/hr
1448.46 tons

270.83 lbs carbon monoxide
(CO)/hr
1186.23 tons CO/yr

16.25 lbs volatile organic
compounds (VOC)/hr
71.17 tons VOC/yr

0.005 lb lead (Pb)/hr
0.02 ton lead (Pb)/yr

15% opacity as a six-minute
average

See A.I.2.e.

control requirements (see
A.I.2.d.)

See A.I.2.f.

See A.I.2.b.

See A.I.2.b.

2. Additional Terms and Conditions

- 2.a All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).
- 2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.c Rotary Kiln #12 was an existing emissions unit previously permitted with kiln numbers 10, 11, and 13 under OEPA source number P004. Rotary Kiln #12 was shutdown in 1983. This PTI allows the permittee to place Rotary Kiln #12 back into operation.
- 2.d The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.021 gr PE/dscf. Based on the BACT analysis, it has been determined that no control technologies for NO_x , SO_2 , CO, and VOC are cost effective.
- 2.e The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rule 3745-31-10 through 20, and OAC rule 3745-18-80 (B).
- 2.f The permittee shall not cause or permit the emission of SO_2 to exceed a maximum of 34.0 lbs SO_2 per ton of actual process weight input.

II. Operational Restrictions

1. The permittee shall only burn coal, coke, and natural gas in this emissions unit. The maximum sulfur content of the coal shall not exceed 5.50 percent by weight. The maximum sulfur content of the coke shall not exceed 6.50 percent by weight.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect or require the coal and coke suppliers to collect a representative grab sample for each shipment of coal and coke that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content (percent) in accordance with the following ASTM methods: 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. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.
2. The permittee shall maintain monthly records of the results of the analyses for the sulfur content in

the coal and coke.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one- minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

IV. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports that identify any exceedances of the annual emission limitations specified in Section A.I.1. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that calendar year.
2. The permittee shall submit deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which identify any exceedances in the maximum sulfur content of the coal of 5.50 percent or the maximum sulfur content of the coke of 6.50 percent.
3. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in section A.I.1., detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement

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to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions units in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission restrictions of: 14.23 lbs PE/hr, 0.021 gr PE/dscf, 541.68 lbs NO_x/hr, 330.70 lbs SO₂/hr, 34.0 lbs SO₂/ton of actual process weight input, 270.83 lbs CO/hr, 16.25 lbs VOC/hr, and 0.005 lb lead/hr.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

Pollutant	Applicable 40 CFR Part 60, Appendix A Test Method
gr PE/dscf	Method 5
PM ₁₀	Method 201 or 201 A or Method 5 (including the back half of the sampling train and particle size distribution)
NO _x	Method 7 E
SO ₂	Method 6 C
CO	Method 10
VOC	Method 25 A
Lead	Method 12 A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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). The permittee may request additional time for the submittal, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. Prior to operation of the existing continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emission unit will be operated, but not later than 180 days after the effective date of this permit, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 1. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency pursuant to OAC rule 3745-15-04 within 30 days after the test is completed. Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I), and 40 CFR Part 60, Appendix B, Performance Specification 1 including section 5.1.9 (mandatory).

3. Compliance with the emission limitations in Section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
14.23 lbs PE/hr

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62.33 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.021 gr/dscf by the maximum volumetric air flow (79044 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall also be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. Compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- b. Emission Limitation:
 0.021 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance using the manufacturer's guaranteed outlet grain loading concentration. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

- c. Emission Limitation:
 541.68 lbs NO_x/hr
 2372.56 tons NO_x/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (20.003 lb NO_x/ton lime) by the maximum throughput. Compliance shall also be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
 330.70 lbs SO₂/hr
 1448.46 tons SO₂/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (12.212 lb SO₂/ton lime) by

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the maximum throughput with an inherent 70% reduction in SO₂ from the natural dry scrubbing of the kiln. This limit was established in accordance with a maximum coke usage of 100% with a 6.50% sulfur content. Compliance shall also be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- e. Emission Limitation:
 270.83 lbs CO/hr
 1186.23 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (10.001 lb OC/ton lime) by the maximum throughput. Compliance shall also be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- f. Emission Limitation:
 16.25 lbs VOC/hr
 71.17 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (0.6 lb VOC/ton lime) by the maximum throughput. Compliance shall also be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- g. Emission Limitation:
 0.005 lb lead/hr
 0.02 ton lead/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation was developed by multiplying the appropriate company supplied emission factors (0.00042 lb lead/ton lime) by the maximum throughput. Compliance shall also be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- h. Emission Limitation:
34.0 lbs SO₂/ton of actual process weight input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by the testing requirements specified in A.V.1.

- i. Emission Limitation:
15% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Rotary Kiln #12.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-11 (B)
P004 - Rotary Kiln #13 (see A.I.2.c.).	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-07 (A)
	40 CFR Part 52.21	
	OAC rule 3745-31-10 through 20	
	OAC rule 3745-18-80 (B)	

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Applicable Emissions
Limitations/Control
Measures

See A.I.2.b.

14.23 lbs particulate
emissions (PE)/hr
62.33 tons PE/yr
(see A.I.2.a.)

See A.I.2.b.

0.021 gr PE/dscf

541.68 lbs nitrogen oxides
(NO_x)/hr
2372.56 tons NO_x/yr

330.70 lbs sulfur dioxide
(SO₂)/hr
1448.46 tons

270.83 lbs carbon monoxide
(CO)/hr
1186.23 tons CO/yr

16.25 lbs volatile organic
compounds (VOC)/hr
71.17 tons VOC/yr

0.005 lb lead (Pb)/hr
0.02 ton lead (Pb)/yr

15% opacity as a six-minute
average

See A.I.2.e.

control requirements (see
A.I.2.d.)

See A.I.2.f.

2. Additional Terms and Conditions

- 2.a** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).
- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.c** Rotary Kiln #13 was an existing emissions unit previously permitted with kiln numbers 10, 11, and 12 under OEPA source number P004. Rotary Kiln #13 was shutdown in 1983. This PTI allows the permittee to place Rotary Kiln #13 back into operation.
- 2.d** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.021 gr PE/dscf. Based on the BACT analysis, it has been determined that no control technologies for NO_x , SO_2 , CO, and VOC are cost effective.
- 2.e** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rule 3745-31-10 through 20, and OAC rule 3745-18-80 (B).
- 2.f** The permittee shall not cause or permit the emission of SO_2 to exceed a maximum of 34.0 lbs SO_2 per ton of actual process weight input.

II. Operational Restrictions

- 1. The permittee shall only burn coal, coke, and natural gas in this emissions unit. The maximum sulfur content of the coal shall not exceed 5.50 percent by weight. The maximum sulfur content of the coke shall not exceed 6.50 percent by weight.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect or require the coal and coke suppliers to collect a representative grab sample for each shipment of coal and coke that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content (percent) in accordance with the following ASTM methods: 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. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

2. The permittee shall maintain monthly records of the results of the analyses for the sulfur content in the coal and coke.
3. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one- minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

IV. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports that identify any exceedances of the annual emission limitations specified in Section A.I.1. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that calendar year.
2. The permittee shall submit deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which identify any exceedances in the maximum sulfur content of the coal of 5.50 percent or the maximum sulfur content of the coke of 6.50 percent.
3. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in section A.I.1., detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on

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line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions units in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission restrictions of: 14.23 lbs PE/hr, 0.021 gr PE/dscf, 541.68 lbs NO_x/hr, 330.70 lbs SO₂/hr, 34.0 lbs SO₂/ton of actual process weight input, 270.83 lbs CO/hr, 16.25 lbs VOC/hr, and 0.005 lb lead/hr.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

Pollutant	Applicable 40 CFR Part 60, Appendix A Test Method
gr PE/dscf	Method 5
PM ₁₀	Method 201 or 201 A or Method 5 (including the back half of the sampling train and particle size distribution)
NO _x	Method 7 E
SO ₂	Method 6 C
CO	Method 10
VOC	Method 25 A
Lead	Method 12 A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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). The permittee may request additional time for the submittal, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. Prior to operation of the existing continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emission unit will be operated, but not later than 180 days after the effective date of this permit, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 1. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency pursuant to OAC rule 3745-15-04 within 30 days after the test is completed. Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I), and 40 CFR Part 60, Appendix B, Performance Specification 1 including section 5.1.9 (mandatory).

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

- a. Emission Limitation:
 14.23 lbs PE/hr
 62.33 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.021 gr/dscf by the maximum volumetric air flow (79044 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. Compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- b. Emission Limitation:
 0.021 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the manufacturer's guaranteed outlet grain loading concentration. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

- c. Emission Limitation:
 541.68 lbs NO_x/hr
 2372.56 tons NO_x/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (20.003 lb NO_x/ton lime) by the maximum throughput. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
 330.70 lbs SO₂/hr
 1448.46 tons SO₂/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (12.212 lb SO₂/ton lime) by the maximum throughput with an inherent 70% reduction in SO₂ from the natural dry scrubbing of the kiln. This limit was established in accordance with a maximum coke usage of 100% with a 6.50% sulfur content. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- e. Emission Limitation:
270.83 lbs CO/hr
1186.23 tons CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (10.001 lb OC/ton lime) by the maximum throughput. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- f. Emission Limitation:
16.25 lbs VOC/hr
71.17 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (0.6 lb VOC/ton lime) by the maximum throughput. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- g. Emission Limitation:
0.005 lb lead/hr
0.02 ton lead/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the appropriate company supplied emission factors (0.00042 lb lead/ton lime) by the maximum throughput. Compliance shall be demonstrated by the testing requirements specified in A.V.1.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- h. Emission Limitation:
34.0 lbs SO₂/ton of actual process weight input

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by the testing requirements specified in A.V.1.

- i. Emission Limitation:
15% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Rotary Kiln #13.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P901 - Solid Fuel (Coal and Coke) Handling.	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B) OAC rule 3745-17 -07 (A)
	40 CFR Part 52.21	

Applicable Emissions
Limitations/Control
Measures

See A.I.2.e.

See A.I.2.f.

Fugitive Emissions

See A.I.2.f.

0.62 ton particulate
emissions (PE)/yr

0.31 ton particulate matter
less than 10 microns in size
(PM₁₀)/yr

Stack Emissions

0.89 lb PE/hr
3.90 tons PE/yr
(see A.I.2.i.)

0.01 gr PE/dscf

no visible emissions from
building enclosures (see
A.I.2.c.)

7% opacity from stack
emissions (see A.I.2.c.)

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.b. and
A.I.2.c.)

See A.I.2.g.

See A.I.2.h.

See A.I.2.d.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Solid Fuel Handling (coal and coke)

- 2.b** Implementation of the control measure(s), identified in A.I.2.c., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.c** Visible particulate emissions from solid fuel handling operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
truck unloading to hopper	transfer point	building enclosure	no visible emissions
E-191 to T-191.1 & 2	transfer point	building enclosure	no visible emissions
E-191 to T-191.3 & 4	transfer point	building enclosure	no visible emissions
E-191 to T-191.5 & 6	transfer point	building enclosure	no visible emissions
E-191 to T-191.7 & 8	transfer point	building enclosure	no visible emissions
E-191 to T-191.9 & 10	transfer point	building enclosure	no visible emissions
E-191 to T-191.11 & 12	transfer point	building enclosure	no visible emissions
E-191 to C-191	transfer point	building enclosure	no visible emissions
C-191 to C-191.1	transfer point	building enclosure	no visible emissions
C-191.1 to C-192	transfer point	building enclosure	no visible emissions
C-192 to solid fuel storage bunkers (6)	transfer point	building enclosure	no visible emissions
F-193.1,2, & 3 to C-193	transfer point	building enclosure	no visible emissions
F-193.1,2, & 3 to C-293	transfer point	building enclosure	no visible emissions
hopper to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-191.1 & 2 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-191.3 & 4 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-191.5 & 6 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building

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T-191.7 & 8 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-191.9 & 10 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-191.11 & 12 to E-191	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-193 to R-196	transfer point	total enclosure	no visible emissions
C-293 to R-296	transfer point	total enclosure	no visible emissions
R-196	crushing	total enclosure	no visible emissions
R-296	crushing	total enclosure	no visible emissions

- 2.d** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf (see A.I.2.c.).
- 2.i** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop range applies at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop range shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouse in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

- The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and crushing operations of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points and crushing operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation: fugitive
0.62 ton particulate emissions (PE)/yr

Applicable Compliance Method:
 The permittee shall demonstrate compliance with this emission limitation by combining the fugitive emissions from the transfer and crushing operations of this emissions unit (see A.I.2.c.) at a maximum operating schedule of 8760 hrs/yr, where:

$transfer_1 =$ the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)

multiplied by the maximum throughput with an applied 95% control efficiency;

transfer₂ = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)
multiplied by the maximum throughput with an applied 100% control efficiency;
and

crushing = the appropriate emission factors from AP-42 Chapter 11.19.2 (1/95)
multiplied by the maximum throughput with an applied 100% control efficiency.

- b. Emission Limitation: fugitive
0.31 ton particulate matter less than 10 microns in size (PM₁₀)/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by combining the fugitive emissions from the transfer and crushing operations of this emissions unit (see A.I.2.c.) at a maximum operating schedule of 8760 hrs/yr, where:

transfer₁ = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)
multiplied by the maximum throughput with an applied 95% control efficiency;

transfer₂ = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)
multiplied by the maximum throughput with an applied 100% control efficiency;
and

crushing = the appropriate emission factors from AP-42 Chapter 11.19.2 (1/95)
multiplied by the maximum throughput with an applied 100% control efficiency.

- c. Emission Limitation: stack
0.89 lb particulate emissions (PE)/hr
3.90 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (10411 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

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The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
 0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

- e. Emission Limitation:
 no visible emissions from building enclosures

Applicable Compliance Method:

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

- f. Emission Limitation:
 7% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P901 - Solid Fuel (Coal and Coke) Handling.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P902 - Common Product Handling.	OAC rule 3745-31-05 (A)(3)	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)

Applicable Emissions
Limitations/Control
Measures

See A.I.2.f.

Fugitive Emissions
0.63 ton particulate
emissions (PE)/yr

0.30 ton particulate matter
less than 10 microns in size
(PM₁₀)/yr

Stack Emissions
1.77 lbs PE/hr (see A.I.2.j.)
7.75 tons PE/yr
(see A.I.2.i.)

0.01 gr PE/dscf

no visible emissions from
building enclosures (see
A.I.2.c.)

7% opacity from stack
emissions (see A.I.2.c.)

10% opacity from transfer
points and screening
operations (see A.I.2.c.)

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.b. and
A.I.2.c.)

See A.I.2.g.

See A.I.2.h

See A.I.2.d.

See A.I.2.e.

See A.I.2.f.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Common Product Handling

- 2.b** Implementation of the control measure(s), identified in A.I.2.c., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.c** Visible particulate emissions from the common product handling operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
#1 kiln cooler to C-131	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-131 to E-131	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-131 to C-132	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-131 to S-131	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-131 to C-134	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
#2 kiln cooler to C-231	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-231 to E-231	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-231 to C-132	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-231 to S-231	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building

S-231 to C-234	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-131 to T-131.5	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-131 to C-133	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-131 to T-131.5	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-231 to T-231.5	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-231 to C-133	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-231 to T-231.5	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-133 to C-141	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-134 to T-131.1, 2, 3, & 4	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-234 to T-232.1, 2, 3, & 4	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
E-135 to C-141	transfer point	partial enclosure and baghouse	7% -stack 10%-fugitive
S-131	screen	building enclosure and baghouse	7%-stack no visible emissions from building
S-231	screen	building enclosure and baghouse	7%-stack no visible emissions from building
product storage bins to C-135	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-135 to C-135.1	transfer point	partial enclosure and baghouse	7% -stack 10%-fugitive

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C-135 to E-135	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
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- 2.d** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be a partial enclosure or building enclosure and the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf (see A.I.2.c.).
- 2.i** All particulate emissions are assumed to be particulate matter less than 10 µm in size (PM₁₀).
- 2.j** The total PE limitation is comprised of two emission points, Baghouse D-131 and Baghouse D-135. The emission limitation of 1.77 lbs PE/hr is a summation of the emissions from both emission points and was established in accordance with the following:

$$1.77 \text{ lbs PE/hr} = (D-131) + (D-135)$$

where,

$$\begin{aligned} D-131 &= \text{PE emissions from Baghouse D-131} \\ &= (0.01 \text{ gr/dscf}) (16089 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ &= 1.38 \text{ lbs PE/hr} \end{aligned}$$

D-135 = PE emissions from Baghouse D-135
 = (0.01 gr/dscf) (4543 dscfm) (60 min/hr) (lb/7000 gr)
 = 0.39 lb PE/hr

II. Operational Restrictions

1. The pressure drops across the baghouses (D-131 and D-135) shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop ranges apply at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop ranges shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouses in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drops across the baghouses (D-131 and D-135) while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drops across the baghouses on a weekly basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and crushing operations of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the partial enclosures used to control the transfer points and screening operations of this emissions unit. If visible fugitive emissions are observed, the permittee shall note the following in an operations log:

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- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports for baghouses D-131 and D-135, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drops across the baghouses did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points and screening operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive emissions that are not representative of normal operations were observed from the partial enclosures used to control the transfer points and screening operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation: fugitive
0.63 ton particulate emissions (PE)/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from from AP-42 Chapter 13.2.4 (1/95) by the maximum throughput, applying a 5% loss in capture efficiency from the partial enclosure (see A.I.2.c.), and multiplying by the maximum operating schedule of 8760 hrs/yr.
 - b. Emission Limitation: fugitive
0.30 ton particulate matter less than 10 microns in size (PM₁₀)/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from from AP-42 Chapter 13.2.4 (1/95) by the maximum throughput, applying a 5% loss in capture efficiency from the partial enclosure (see A.I.2.c.), and multiplying by the maximum operating schedule of 8760 hrs/yr.

- c. Emission Limitation: stack
1.77 lbs particulate emissions (PE)/hr
7.75 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation using outlet grain loading emission factors and maximum volumetric air flow rates for baghouses D-131 and D-135 (see A.I.2.j.). Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouses. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

- e. Emission Limitation:
no visible emissions from building enclosures

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in

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paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

- f. Emission Limitation:
7% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g. Emission Limitation:

10% opacity from transfer points and screening operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P902 - Common Product Handling.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P903 - Product Storage/Loadout #1.	OAC rule 3745-31-05 (A)(3)	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)

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Applicable Emissions
Limitations/Control
Measures

See A.I.2.d.

See A.I.2.e.

Fugitive Emissions

0.63 ton particulate
emissions (PE)/yr

See A.I.2.f.

See A.I.2.f.

0.30 ton particulate matter
less than 10 microns in size
(PM₁₀)/yr

Stack Emissions

0.62 lb PE/hr (see A.I.2.j.)

2.72 tons PE/yr
(see A.I.2.i.)

0.01 gr PE/dscf

no visible emissions from
building enclosures (see
A.I.2.c.)

7% opacity from stack
emissions (see A.I.2.c.)

10% opacity from loading
operation (see A.I.2.c.)

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.b. and
A.I.2.c.)

See A.I.2.g.

See A.I.2.h.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Product Storage/Loadout #1

- 2.b** Implementation of the control measure(s), identified in A.I.2.c., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.c** Visible particulate emissions from the product storage/loadout #1 operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
T-136.1E, 3W, 5W to C-137.1	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T136.2W, 4E to C-137.2	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
T-136.6E, 7W, 8W, 9E, 10W, C-137.1, and C-137.2 to C-138	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-138 to C-139	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-139 to loadout hopper	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
loadout hopper to railcar	loading	partial enclosure and baghouse	7%-stack 10%-fugitive

- 2.d** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation

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established pursuant to OAC rule 3475-31-05 (A)(3).

- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be a partial enclosure or building enclosure and the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf (see A.I.2.c.).
- 2.i** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).
- 2.j** The total PE limitation is comprised of two emission points, Baghouse D-138 and Baghouse D-139. The emission limitation of 0.62 lb PE/hr is a summation of the emissions from both emission points and was established in accordance with the following:

$$0.62 \text{ lb PE/hr} = (\text{D-138}) + (\text{D-139})$$

where,

$$\begin{aligned} \text{D-138} &= \text{PE emissions from Baghouse D-138} \\ &= (0.01 \text{ gr/dscf}) (6057 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ &= 0.52 \text{ lb PE/hr} \end{aligned}$$

$$\begin{aligned} \text{D-139} &= \text{PE emissions from Baghouse D-139} \\ &= (0.01 \text{ gr/dscf}) (1136 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ &= 0.10 \text{ lb PE/hr} \end{aligned}$$

II. Operational Restrictions

- The pressure drops across the baghouses (D-138 and D-139) shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop ranges apply at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop ranges shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouses in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drops across the baghouses (D-138 and D-139) while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drops across the baghouses on a weekly basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and crushing operations of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the partial enclosure used to control the loading operations of this emissions unit. If visible fugitive emissions are observed, the permittee shall note the following in an operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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1. The permittee shall submit pressure drop deviation (excursion) reports for baghouses D-138 and D-139, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drops across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points and loading operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive emissions that are not representative of normal operations were observed from the partial enclosure used to control the loading operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation: fugitive
0.63 ton particulate emissions (PE)/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from from AP-42 Chapter 13.2.4 (1/95) by the maximum throughput, applying a 5% loss in capture efficiency from the partial enclosure (see A.I.2.c.), and multiplying by the maximum operating schedule of 8760 hrs/yr.
 - b. Emission Limitation: fugitive
0.30 ton particulate matter less than 10 microns in size (PM₁₀)/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from from AP-42 Chapter 13.2.4 (1/95) by the maximum throughput, applying a 5% loss in capture efficiency from the partial enclosure (see A.I.2.c.), and multiplying by the maximum operating schedule of 8760 hrs/yr.
 - c. Emission Limitation: stack
0.62 lb particulate emissions (PE)/hr
2.72 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation using outlet grain loading emission factors and maximum volumetric air flow rates for baghouses D-138 and D-139 (see A.I.2.j.). Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouses. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

- e. Emission Limitation:
no visible emissions from building enclosures

Applicable Compliance Method:

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

- f. Emission Limitation:
7% opacity from stack emissions

Applicable Compliance Method:

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

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Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- g. Emission Limitation:
10% opacity from loading operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P903 - Product Storage/Loadout #1.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment

P904 - Product Storage/Loadout #2.

Applicable Rules/Requirements

OAC rule 3745-31-05 (A)(3)

40 CFR Part 52.21

OAC rule 3745-31-10 through 20

OAC rule 3745-17-08 (A)

OAC rule 3745-17-07 (B)(1)

OAC rule 3745-17-11 (B)

OAC rule 3745-17-07 (A)

Applicable Emissions
Limitations/Control
Measures

See A.I.2.d.

Fugitive Emissions
2.40 tons particulate
emissions (PE)/yr

See A.I.2.e.

See A.I.2.f.

1.13 tons particulate matter
less than 10 microns in size
(PM₁₀)/yr

See A.I.2.f.

Stack Emissions

1.30 lbs PE/hr

5.69 ton PE/yr

(see A.I.2.i.)

0.01 gr PE/dscf

no visible emissions from
building enclosures (see
A.I.2.c.)

7% opacity from stack
emissions (see A.I.2.c.)

10% opacity from transfer
points and loading
operations (see A.I.2.c.)

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.b. and
A.I.2.c.)

See A.I.2.g.

See A.I.2.h.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Product Storage/Loadout #2

- 2.b** Implementation of the control measure(s), identified in A.I.2.c., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.c** Visible particulate emissions from the product storage/loadout #2 operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
T-142 to truck/rail	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
T-143 to truck/rail	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
T-144 to truck/rail	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
C-164 to truck/rail	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
T-142, T-143, or T-144 to C-162	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-162 to S-162	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-162 to C-164	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-162 to C-163 (SC)	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-163 to E-152	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-154 to E-151	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
S-162	screen	building enclosure and baghouse	7%-stack no visible emissions from building
R-151	pelletizing	building enclosure and baghouse	7%-stack no visible emissions from building

R-152	pelletizing	building enclosure and baghouse	7%-stack no visible emissions from building
T-141 to truck	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
T-151 to truck	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
C-165 to truck	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
truck/rail to C-151	transfer point	partial enclosure	10%-fugitive
C-151 to E-151	transfer point	partial enclosure	10%-fugitive

- 2.d** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. BACT has been determined to be a partial enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf (see A.I.2.c.).

- 2.i All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop range applies at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop range shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouse in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and crushing operations of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the partial enclosures used to control the transfer points and loading operations of this emissions unit. If visible fugitive emissions are observed, the permittee shall note the following in an operations log:

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- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points, screening, and pelletizing operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive emissions that are not representative of normal operations were observed from the partial enclosures used to control the transfer points and loading operations of this emissions unit exceeded 10 percent opacity and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation: fugitive
2.40 tons particulate emissions (PE)/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation by combining the annual fugitive emissions from the partially enclosed transfer and loading operations (see A.I.2.c.) at a maximum operating schedule of 8760 hrs/yr,

where:

transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 50% control efficiency; and

loading = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 5% loss in capture efficiency from the partial enclosure.

- b. Emission Limitation: fugitive
1.13 tons particulate matter less than 10 microns in size (PM₁₀)/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by combining the annual fugitive emissions from the partially enclosed transfer and loading operations (see A.I.2.c.) at a maximum operating schedule of 8760 hrs/yr, where:

transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 50% control efficiency; and

loading = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 5% loss in capture efficiency from the partial enclosure.

- c. Emission Limitation: stack
1.30 lbs particulate emissions (PE)/hr
5.69 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (15143 dscfm), using the appropriate conversion factors of 7000 grains/lb, 1 scf/1 acf, 60 minutes/hr. Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouse. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760

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hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

d. Emission Limitation:

0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

e. Emission Limitation:

no visible emissions from building enclosures

Applicable Compliance Method:

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

f. Emission Limitation:

7% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g. Emission Limitation:

10% opacity from transfer points and loading operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P904 - Product Storage/Loadout #2.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P905 - Kiln Dust Handling.	OAC rule 3745-31-05 (A)(3)	OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)
	40 CFR Part 52.21	
	OAC rule 3745-31-10 through 20	

Applicable Emissions
Limitations/Control
Measures

See A.I.2.d.

Fugitive Emissions

See A.I.2.e.

0.50 ton particulate
emissions (PE)/yr

See A.I.2.f.

0.21 ton particulate matter
less than 10 microns in size
(PM₁₀)/yr

See A.I.2.f.

Stack Emissions

0.24 lb PE/hr (see A.I.2.j.)

1.05 tons PE/yr
(see A.I.2.i.)

0.01 gr PE/dscf

no visible emissions from
building enclosures (see
A.I.2.c.)

7% opacity from stack
emissions (see A.I.2.c.)

10% opacity from transfer
points and loading
operations (see A.I.2.c.)

best available control
measures that are sufficient
to minimize or eliminate
visible emissions of fugitive
dust (see A.I.2.b. and
A.I.2.c.)

See A.I.2.g.

See A.I.2.h.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Kiln Dust Handling

- 2.b** Implementation of the control measure(s), identified in A.I.2.c., in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.c** Visible particulate emissions from the kiln dust handling operations included under this permit shall not exceed the following opacity restrictions:

Emissions Point (company ID)	Equipment Type	BACT Control Requirements	Opacity Limitations
D-185 to T-188	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
D-285 to T-188	transfer point	building enclosure and baghouse	7%-stack no visible emissions from building
C-188 to truck	loading	partial enclosure and baghouse	7%-stack 10%-fugitive
T-188 to C-188	transfer point	partial enclosure and watering	10%-fugitive
C-188 to R-188	transfer point	partial enclosure and watering	10%-fugitive
R-188 to truck	loading	partial enclosure and watering	10%-fugitive
C-121.1 & C-121.2 to dust bin (kiln #1)	transfer point	water - sludge	no visible emissions
C-221.1 & C-221.2 to dust bin (kiln #2)	transfer point	water - sludge	no visible emissions
dust collector #1 to C-185	transfer point	sealed conveyor, negative pressure	no visible emissions
dust collector #1 to C-186	transfer point	sealed conveyor, negative pressure	no visible emissions
C-185 & C-186 to C-187	transfer point	sealed conveyor, negative pressure	no visible emissions
dust collector #2 to C-285	transfer point	sealed conveyor, negative pressure	no visible emissions
dust collector #2 to C-286	transfer point	sealed conveyor, negative pressure	no visible emissions

C-285 & C-286 to C-287	transfer point	sealed conveyor, negative pressure	no visible emissions
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- 2.d** Ohio Lime Maple Grove Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.g** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.
- 2.h** The permittee shall employ best available control technology (BACT) on this emission unit. See A.I.2.c. for the BACT determination.
- 2.i** All particulate emissions are assumed to be particulate matter less than 10 μm in size (PM_{10}).
- 2.j** The total PE limitation is comprised of two emission points, Baghouse D-188 and Baghouse D-189. The emission limitation of 0.24 lb PE/hr is a summation of the emissions from both emission points and was established in accordance with the following:

$$0.24 \text{ lb PE/hr} = (\text{D-188}) + (\text{D-189})$$

where,

$$\begin{aligned} \text{D-188} &= \text{PE emissions from Baghouse D-188} \\ &= (0.01 \text{ gr/dscf}) (1577 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ &= 0.14 \text{ lb PE/hr} \end{aligned}$$

$$\begin{aligned} \text{D-189} &= \text{PE emissions from Baghouse D-189} \\ &= (0.01 \text{ gr/dscf}) (1136 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ &= 0.10 \text{ lb PE/hr} \end{aligned}$$

II. Operational Restrictions

1. The pressure drops across the baghouses (D-188 and D-189) shall be maintained within the range of * inches of water while the emissions unit is in operation. The established pressure drop ranges apply at all times except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

*The pressure drop ranges shall be established within 60 days after the final issuance of this permit. The permittee shall operate the baghouses in accordance with these established values.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drops across the baghouses (D-188 and D-189) while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building used to enclose the transfer points and crushing operations of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the cause of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the partial enclosures used to control the transfer points and loading operations of this emissions unit. If visible fugitive emissions are observed, the permittee shall note the following in an operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports for baghouses D-188 and D-189, in accordance with the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drops across the baghouses did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive emissions were observed from the building used to enclose the transfer points and loading operations of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports which (a) identify all days during which visible fugitive emissions that are not representative of normal operations were observed from the partial enclosures used to control the transfer points and loading operations of this emissions unit exceeded 10 percent opacity and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation: fugitive
0.50 ton particulate emissions (PE)/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by combining the annual fugitive emissions from the transfer points, loading¹ (partial enclosure/baghouse), and loading² (partial enclosure/watering) operations of this emissions unit (see A.I.2.c.), at the maximum operating schedule of 8760 hrs/yr where:

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transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)
multiplied by the maximum throughput with the following control efficiencies:

Best Available Control Measures under BAT	Control Efficiency
partial enclosure/watering	87.5%
watering (sludge-like material)	100%
sealed conveyor, negative pressure	100%

loading¹ = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 5% loss in capture efficiency from the partial enclosure; and

loading² = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 87.5% control efficiency.

- b. Emission Limitation: fugitive
0.21 ton particulate matter less than 10 microns in size (PM₁₀)/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by combining the annual fugitive emissions from the transfer points, loading¹ (partial enclosure/baghouse), and loading² (partial enclosure/watering) operations of this emissions unit (see A.I.2.c.), at the maximum operating schedule of 8760 hrs/yr where:

transfer = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with the following control efficiencies:

Best Available Control Measures under BAT	Control Efficiency
partial enclosure/watering	87.5%
watering (sludge-like material)	100%
sealed conveyor, negative pressure	100%

loading¹ = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95) multiplied by the maximum throughput with an applied 5% loss in capture efficiency from the partial enclosure; and

loading² = the appropriate emission factors from AP-42 Chapter 13.2.4 (1/95)

multiplied by the maximum throughput with an applied 87.5% control efficiency.

- c. Emission Limitation: stack
0.24 lb particulate emissions (PE)/hr
1.05 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation using outlet grain loading emission factors and maximum volumetric air flow rates for baghouses D-188 and D-189 (see A.I.2.j.). Compliance shall be demonstrated by the monitoring, recordkeeping, and reporting requirements for the baghouses. If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation; compliance will also be shown with the annual limitation.

- d. Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

- e. Emission Limitation:
no visible emissions from building enclosures

Applicable Compliance Method:

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

- f. Emission Limitation:
7% opacity from stack emissions

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Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- g. Emission Limitation:
10% opacity from transfer points and loading operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Method 5.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P905 - Kiln Dust Handling.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None