



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

12/18/2015

Certified Mail

Rodney Morley  
Carmeuse Lime, Inc. - Maple Grove Operations  
1967 W County Road 42  
PO Box 708  
Bettsville, OH 44815

Facility ID: 0374000010  
Permit Number: P0103790  
County: Seneca

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

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

**How to appeal this permit**

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

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

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office as indicated on page one of your permit.

Sincerely,



Michael E. Hopkins, P.E.  
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA DAPC, Northwest District Office



**FINAL**

**Division of Air Pollution Control  
Title V Permit**

for

**Carmeuse Lime, Inc. - Maple Grove Operations**

Facility ID:	0374000010
Permit Number:	P0103790
Permit Type:	Renewal
Issued:	12/18/2015
Effective:	1/8/2016
Expiration:	1/8/2021





**Division of Air Pollution Control**  
**Title V Permit**  
for  
Carmeuse Lime, Inc. - Maple Grove Operations

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	2
1. Federally Enforceable Standard Terms and Conditions .....	3
2. Monitoring and Related Record Keeping and Reporting Requirements.....	3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance.....	6
4. Risk Management Plans .....	7
5. Title IV Provisions .....	7
6. Severability Clause .....	7
7. General Requirements .....	7
8. Fees.....	8
9. Marketable Permit Programs.....	8
10. Reasonably Anticipated Operating Scenarios .....	9
11. Reopening for Cause .....	9
12. Federal and State Enforceability .....	9
13. Compliance Requirements .....	10
14. Permit Shield .....	11
15. Operational Flexibility.....	11
16. Emergencies .....	12
17. Off-Permit Changes .....	12
18. Compliance Method Requirements .....	12
19. Insignificant Activities or Emissions Levels.....	13
20. Permit to Install Requirement.....	13
21. Air Pollution Nuisance .....	13
22. Permanent Shutdown of an Emissions Unit .....	13
23. Title VI Provisions .....	13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only .....	14
25. Records Retention Requirements Under State Law Only.....	14
26. Inspections and Information Requests .....	14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements.....	15
28. Permit Transfers .....	15



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations .....	15
30. Submitting Documents Required by this Permit .....	16
B. Facility-Wide Terms and Conditions.....	17
C. Emissions Unit Terms and Conditions .....	19
1. F001, Roadways & Parking.....	20
2. F002, Material Storage Piles.....	27
3. F003, Limestone Handling .....	38
4. P001, Product Handling # 1 .....	45
5. P002, Product Handling # 2 .....	52
6. P901, Solid Fuel Handling.....	59
7. P902, Common Product Handling.....	68
8. P903, Product Storage/Loadout # 1 .....	77
9. P904, Product Storage/Loadout # 2 .....	87
10. P905, Kiln Dust Handling .....	97
11. P906, Truck Loading Operation; Mobile Transloader .....	106
12. Emissions Unit Group – Rotary Lime Kilns: P003 & P004 .....	115
13. Emissions Unit Group - 160 HP engines: P020, P021 .....	125



**Final Title V Permit**  
Carmeuse Lime, Inc. - Maple Grove Operations  
**Permit Number:** P0103790  
**Facility ID:** 0374000010  
**Effective Date:** 1/8/2016

## Authorization

Facility ID: 0374000010  
Facility Description: Lime plant.  
Application Number(s): A0018700, A0035781, A0039654, A0052393  
Permit Number: P0103790  
Permit Description: Title V renewal operating permit for a lime manufacturing facility.  
Permit Type: Renewal  
Issue Date: 12/18/2015  
Effective Date: 1/8/2016  
Expiration Date: 1/8/2021  
Superseded Permit Number: P0087667

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Carmeuse Lime, Inc. - Maple Grove Operations  
1967 W County Road 42  
PO Box 708  
Bettsville, OH 44815

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

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Title V Permit**  
Carmeuse Lime, Inc. - Maple Grove Operations  
**Permit Number:** P0103790  
**Facility ID:** 0374000010  
**Effective Date:** 1/8/2016

## **A. Standard Terms and Conditions**

**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (5) Standard Term and Condition A. 30.

*(Authority for term: ORC 3704.036(A))*

**2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

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

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

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

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

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northwest District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally

enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

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

### **3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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

#### **4. Risk Management Plans**

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

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

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

#### **5. Title IV Provisions**

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

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

#### **6. 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.

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

#### **7. General Requirements**

- a) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.

- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. Fees**

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

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

## **9. Marketable Permit Programs**

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

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

**10. Reasonably Anticipated Operating Scenarios**

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

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

**11. Reopening for Cause**

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

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

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

**12. Federal and State Enforceability**

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

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

### 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) 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.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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 Ohio EPA DAPC, Northwest District Office 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:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms



and conditions with which there has been continuous compliance throughout the year are not separately identified.

- b. The permittee's current compliance status.
- c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
- d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
- e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

#### **14. Permit Shield**

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

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

#### **15. Operational Flexibility**

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

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

## 16. Emergencies

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

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

## 17. Off-Permit Changes

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

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

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

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

## 18. Compliance Method Requirements

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

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

**19. Insignificant Activities or Emissions Levels**

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

**20. Permit to Install Requirement**

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

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

**21. Air Pollution Nuisance**

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

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

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

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

whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

**27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements**

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

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



**30. Submitting Documents Required by this Permit**

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



**Final Title V Permit**  
Carmeuse Lime, Inc. - Maple Grove Operations  
**Permit Number:** P0103790  
**Facility ID:** 0374000010  
**Effective Date:** 1/8/2016

## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Pursuant to 40 CFR Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions unit P001, P002, P902, P903 and P904 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.  
  
[Authority for term: 40 CFR Part 64]
3. There are no insignificant emissions units at this facility with applicable requirements.



**Final Title V Permit**  
Carmeuse Lime, Inc. - Maple Grove Operations  
**Permit Number:** P0103790  
**Facility ID:** 0374000010  
**Effective Date:** 1/8/2016

## **C. Emissions Unit Terms and Conditions**



**1. F001, Roadways & Parking**

**Operations, Property and/or Equipment Description:**

Roadways and Parking Areas

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b> See b)(2)a and b)(2)b.</p> <p>4.05 tons fugitive particulate emissions (PE) per rolling, 12-month period</p> <p>1.13 tons fugitive particulate matter ≤10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive PE from the paved roadways and parking areas, except for a period of time not to exceed one minute during any 60-minute observation period.</p> <p>There shall be no visible fugitive PE from the unpaved roadways and parking areas, except for a period of time not to exceed three minutes during any 60-minute observation period.</p>
b.	OAC rule 3745-31-05(A)(3)(a), as effective 11/30/2001	Work Practice Standards [See b)(2)c.]
c.	OAC rule 3745-31-05(A)(3)(a), as effective 12/1/2006	See b)(2)d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	This emissions unit 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), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.
e.	OAC rule 3745-17-07(B)	Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been determined to be:
  - i. The permittee shall employ work practice standards and/or control measures capable of meeting the following visible emission restrictions that are consistent with a 90% reduction in fugitive emissions, as proposed in the permit application:
    - (a) There shall be no visible fugitive PE from the paved roadways and parking areas, except for a period of time not to exceed one minute during any 60-minute observation period.
    - (b) There shall be no visible fugitive PE from the unpaved roadways and parking areas, except for a period of time not to exceed three minutes during any 60-minute observation period.
  - ii. The work practice standards and/or control measures may include, but are not limited to the following operating practices:
    - (a) watering and/or the application of chemical stabilization/dust suppressants;
    - (b) speed reduction;
    - (c) rapid removal of spillage on plant roadways and parking areas;
    - (d) covering at all times any open-bodied vehicles transporting materials likely to become airborne, if the control measure is necessary for the materials being transported; and
    - (e) prompt removal, in such a manner as to minimize or prevent resuspension, of 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.

- iii. The needed frequencies of implementation of the work practice standards and/or control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit.

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

- b. Any unpaved roadway or parking area that takes on the characteristics of a paved surface due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved surfaces. Any unpaved roadway or parking area that is paved during the term of this permit, shall be subject to the visible emission limitation for paved roadways and parking areas.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), effective November 30, 2001, have been determined to be the following:
  - i. The permittee shall employ work practice standards and/or control measures consistent with a 90% reduction in fugitive dust from the roadways and parking areas [See b)(2)a].

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

It should be noted that the requirements established pursuant to OAC rules 3745-31-10 through 20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

The "Best Available Technology (BAT)" requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. PE (also referred to as



total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS. In addition, the BAT requirements under 3745-31-05(A)(3) do not apply to the emissions of PM<sub>10</sub> because the potential to emit (PTE) is less than 10 tons per year taking into consideration the voluntary restriction(s) established under OAC rules 3745-31-10 through 20.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway and parking area in accordance with the following frequencies:

Roadways and Parking Areas	Minimum Inspection Frequency
all paved roadways and parking areas	daily
all unpaved roadways and parking areas	daily

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The purpose of the inspections is to determine the need for implementing the work practice standards and/or control measures identified in b)(2)a.
  - a. The inspections shall be performed during representative, normal traffic conditions.
  - b. 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.
  - c. 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.
  - d. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;



- c. the dates the control measures were implemented;
- d. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures, but implementation of the control measures would have resulted in unsafe or hazardous driving conditions; and
- e. on a calendar quarter basis, the permittee shall record the following:
  - i. the total number of days that the control measures were implemented;
  - ii. the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
  - iii. the total number of days where it was determined that control measures were necessary, but would have resulted in unsafe or hazardous driving conditions.

The information required in d)(3)e. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring and recordkeeping requirements for visible fugitive emissions in terms d)(1) through d)(3) above:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation;
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
  - c. each instance when the permittee determined it was necessary to implement control measures, but implementation of the control measure would have resulted in unsafe or hazardous driving conditions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) **Testing Requirements**

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

a. Emission Limitations:

1.13 tons fugitive PM<sub>10</sub> per rolling, 12-month period  
4.05 tons fugitive PE per rolling, 12-month period

Applicable Compliance Method:

Compliance with the emission limitations shall be determined by using the emission factor equations in Sections 13.2.1 (1/2011) and 13.2.2 (12/2003) of Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 for paved and unpaved roadways, respectively. Should further updates in AP-42 occur, the most current equations shall be used. These emission limits were based on a maximum of 6,600 paved and 5,700 unpaved vehicle miles traveled (VMT)/year and a 90% control efficiency for the reduction of fugitive emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

b. Emission Limitations:

There shall be no visible fugitive PE from the paved roadways and parking areas, except for a period of time not to exceed one minute during any 60-minute observation period.

There shall be no visible fugitive PE from the unpaved roadways and parking areas, except for a period of time not to exceed three minutes during any 60-minute observation period.



Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.

**2. F002, Material Storage Piles**

**Operations, Property and/or Equipment Description:**

Material Storage Piles and LKD/Waste Lime Disposal

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	15.32 tons particulate emissions (PE) per rolling, 12-month period  5.45 tons particulate matter ≤ 10 microns (PM <sub>10</sub> ) per rolling, 12-month period  See b)(2)b. through b)(2)e.  <u>Load-in and Load-out of Storage Piles:</u>  There shall be no visible fugitive emissions except for a period of time not to exceed one minute during any 60-minute observation period.  <u>Wind Erosion from Storage Piles:</u> There shall be no visible fugitive emissions except for a period of time not to exceed one minute during any 60-minute observation period.  <u>LKD/Waste Lime Disposal Bulldozing and Compacting:</u> Visible fugitive emissions shall not exceed 20% opacity, as a three-minute average.
c.	OAC rule 3745-17-08(A)	This emissions unit is not located within



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		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).
d.	OAC rule 3745-17-11(B)	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) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
- b. The storage piles and operations that are covered by this permit and subject to the requirements of OAC rules 3745-31-10 through 20 are listed below:
  - i. Coal;
  - ii. Coke;
  - iii. Cooling tower lime dust drop pile (hopper north of kilns);
  - iv. Cooling tower lime dust drop pile (hopper south of kilns);
  - v. Small limestone pile #1 (north);
  - vi. Small limestone pile #2 (south);
  - vii. Lime cleanout chute pile (north lime kiln);
  - viii. Lime cleanout chute pile (south lime kiln,);
  - ix. Housekeeping LKD pile (at LKD load-out);
  - x. Temporary LKD pile (south of pug mill); and
  - xi. LKD/waste lime disposal area and material handling activities.
- c. The permittee shall employ best available control technology (BACT) on this emissions unit in order to reduce the fugitive emissions from all load-in and load-out operations associated with the storage piles and the wind erosion from the storage pile surfaces for the purpose of ensuring compliance with the above-mentioned applicable requirements. BACT has been determined to be the following control measures:



Material Storage Pile	Best Available Control Techniques:	Best Available Control Techniques:
	<b>Wind Erosion</b>	<b>Loading Operations</b>
Coal	Water as needed	Minimize drop heights
Coke	Water as needed	Minimize drop heights

BACT shall also include good housekeeping practices on all storage pile operations in order to prevent additional wind dispersal of the materials. Nothing in this term shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The above control measures shall be employed for all load-in and load-out operations associated with the storage piles and the wind erosion from the storage pile surfaces [as identified in b)(2)c.], 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.
  - i. Any required implementation of the control measure(s) for the loading operations shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
  - ii. Implementation of the control measure(s) for wind erosion 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.
- e. The permittee shall employ BACT on this emissions unit in order to reduce the fugitive emissions from the activities associated with the LKD and waste lime material storage piles that will be transferred into the quarry for disposal (LKD/waste lime disposal area):

Material Storage Pile or Disposal Activity	Best Available Control Technology:
(2) Kiln limestone fall-out piles (north and south piles)	Partially enclosed/sheltered piles due to location.  The material shall be transferred into the quarry for disposal continuously during operation to maintain the size of the pile within the partial enclosure. If continuous operations cease, the pile will be removed as part of the shutdown process.  During material handling operations and transport of the material to the quarry for disposal, the



<b>Material Storage Pile or Disposal Activity</b>	<b>Best Available Control Technology:</b>
	material shall be covered or otherwise managed to prevent wind dispersal of dust.
Housekeeping waste lime pile (at truck load-out)	The storage piles must be contained within a storage hopper or engineered, three-sided enclosure manufactured of a material suitable for storage of its contents. The piles shall be maintained at a height below the sides of the enclosure.
Temporary LKD pile (south of pug mill)	<p>The materials shall be kept adequately wet and transferred to the quarry for disposal prior to drying out; OR covered at all times to prevent fugitive emissions.</p> <p>During material handling operations and transport of the material to the quarry for disposal, the material shall be covered or otherwise managed to prevent wind dispersal of dust.</p>
LKD/Waste Lime Disposal Operations	<p>All materials disposed of in the quarry must be emplaced in a manner sufficient to minimize emissions from wind dispersal.</p> <p>All materials shall be pushed below grade on the same day during which they were disposed.</p> <p>Adequate of amounts of stone screenings or soil shall be added to the materials at the active dumping zone, as needed, to allow adequate compaction and to prevent wind erosion.</p> <p>All surfaces of the disposal area, other than the below-grade side slope and active dumping zone, shall be covered with a sufficient thickness of soil, limestone, or other material at the end of each operating day, or at more frequent intervals if necessary, to control blowing dust. Watering may also be employed as an additional dust control</p>



Material Storage Pile or Disposal Activity	Best Available Control Technology:
	<p>measure.</p> <p>Pursuant to MSHA requirements, the permittee shall always maintain a berm around the top of the LKD/waste lime disposal area. The berm shall be composed of the most recent material disposed.</p> <p>The facility shall only dispose of material at the face/edge of the active dumping zone in the quarry. No additional LKD/waste lime piles are permitted in the quarry.</p> <p>The materials disposed of in the quarry shall be maintained at a height below the height of the quarry walls.</p>
	<p>(2) Cooling tower lime dust drop piles (hoppers north and south of kilns):</p> <p>These piles are generated during maintenance activities only. The piles shall be properly disposed of in the quarry within 24 hours of generation.</p>
	<p>(2) Lime cleanout chute piles (north and south of kilns):</p> <p>These piles are generated during maintenance activities only. The permittee shall unload the material directly into the back of a truck with minimal drop heights. If a truck or loader is not available, temporary chutes or equivalent devices shall be employed to minimize drop heights. The material shall be properly disposed of in the quarry within 24 hours of generation.</p>

BACT shall also include good housekeeping practices on all LKD/waste lime disposal activities in order to prevent additional wind dispersal of the materials. Nothing in this term shall prohibit the permittee from employing other control measures to ensure compliance.

- c) Operational Restrictions
  - (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform daily inspections of each load-in operation at each storage pile in accordance with the following frequencies:

Storage pile identification:	Minimum load-in inspection frequency:
Coal	Once per day, during each day of operation
Coke	Once per day, during each day of operation

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

Storage pile identification:	Minimum load-out inspection frequency:
Coal	Once per day, during each day of operation
Coke	Once per day, during each day of operation

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

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

Storage pile identification:	Minimum wind erosion inspection frequency:
Coal	Daily
Coke	Daily

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (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.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (6) The permittee shall maintain records of the following information for each storage pile inspection required in accordance with the monitoring requirements in terms d)(1) through d)(3) above:
- 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 term d)(6)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion) and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (7) 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 following operations associated with the LKD/waste lime disposal operations:
- a. Storage pile load-in operations:
    - i. Limestone fall-out pile #1 (north kiln);
    - ii. Limestone fall-out pile #2 (south kiln);
    - iii. Cooling tower lime dust drop pile (hopper south of kilns)
    - iv. Cooling tower lime dust drop pile (hopper north of kilns);
    - v. Lime cleanout chute pile (north kiln);
    - vi. Lime cleanout chute pile (south kiln);
    - vii. Housekeeping waste lime pile (at truck load-out); and



- viii. Temporary LKD pile (south of pug mill);
- b. Storage pile load-out operations:
  - i. Limestone fall-out pile #1 (north kiln);
  - ii. Limestone fall-out pile #2 (south kiln);
  - iii. Cooling tower lime dust drop pile (hopper south of kilns)
  - iv. Cooling tower lime dust drop pile (hopper north of kilns);
  - v. Lime cleanout chute pile (north kiln);
  - vi. Lime cleanout chute pile (south kiln);
  - vii. Housekeeping waste lime pile (at truck load-out); and
  - viii. Temporary LKD pile (south of pug mill);
- c. Wind erosion from storage pile surfaces:
  - i. Limestone fall-out pile #1 (north kiln);
  - ii. Limestone fall-out pile #2 (south kiln);
  - iii. Cooling tower lime dust drop pile (hopper south of kilns)
  - iv. Cooling tower lime dust drop pile (hopper north of kilns);
  - v. Lime cleanout chute pile (north kiln);
  - vi. Lime cleanout chute pile (south kiln);
  - vii. Housekeeping waste lime pile (at truck load-out); and
  - viii. Temporary LKD pile (south of pug mill); and
- d. Material handling operations associated with the LKD/Waste Lime Disposal Operations (bulldozing, rolling/compacting, surface cover requirements).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (8) In accordance with the daily visible fugitive emission checks in term d)(7), the presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:
  - a. whether the emissions are representative of normal operations;
  - b. if the emissions are not representative of normal operations, the cause of the visible emissions;



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

The information above shall be kept separately for each operation identified in term d)(7).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s). If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify in the quarterly deviation reports any of the following occurrences in accordance with the monitoring requirements for daily fugitive emission inspections in terms d)(1) through d)(6) above:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for daily visible fugitive emission checks in terms d)(7) and d)(8) above:
  - a. all visible emissions checks during which any visible particulate emissions were observed; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. 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.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emissions Limitations:

5.45 tons fugitive PM<sub>10</sub> per rolling, 12-month period  
15.32 tons fugitive PE per rolling, 12-month period

Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following emission factor equations for the storage pile operations:

i. Load-in and Load-out operations

The fugitive emissions from each load-in and load-out operation associated with each storage pile was estimated using the emission factor equation from AP-42, Chapter 13.2.4 (1/95) and the moisture contents, mean wind speed, maximum annual throughputs, and control factors, as supplied in the permit application for each storage pile.

ii. Wind erosion

The fugitive emissions generated from the wind erosion of each storage pile surface was estimated using the emission factor equation from U.S. EPA's Control of Open Fugitive Dust Sources (9/88) and the silt contents, precipitation data, wind velocity data, and maximum pile acreages, as supplied in the permit application for each storage pile. PM<sub>10</sub> emissions were estimated to be 50% of the total PE.

iii. Bulldozing

The fugitive emissions generated from the bulldozing operations associated with the LKD quarry pile were estimated using the emission factor equation from AP-42, Chapter 11.9 (10/98) and the silt content, moisture content, and maximum annual hours of bulldozer operation, as supplied in the permit application.



iv. Pile rolling/compacting

The fugitive emissions generated from the pile rolling/compacting operations associated with the LKD quarry pile were estimated using the emission factor equation from AP-42, Chapter 13.2.2 (11/06) and the silt content, mean vehicle weight, and maximum annual vehicle miles travelled over the pile, as supplied in the permit application.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

b. Emission Limitation:

There shall be no visible fugitive PE except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

Visible fugitive PE shall not exceed 20% opacity, as a three-minute average from the LKD material handling activities.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.

**3. F003, Limestone Handling**

**Operations, Property and/or Equipment Description:**

Limestone Material Handling: material transfer/conveying and screening with building enclosure(s)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b> See b)(2)b.</p> <p>4.65 tons fugitive particulate emissions (PE) per rolling, 12-month period</p> <p>1.56 tons fugitive particulate matter ≤10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p>Visible fugitive emissions shall not exceed 10% opacity, as a six-minute average, from any emission point associated with this emissions unit that is not fully enclosed within a building.</p>
c.	OAC rule 3745-17-08(B)	This emissions unit 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), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)	Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.
e.	40 CFR, Part 60, Subpart OOO	The requirements specified by this rule are equivalent to or less stringent than the requirements established pursuant to OAC rules 3745-31-10 through 20 and/or 40 CFR, Part 63, Subpart AAAAA.
f.	40 CFR, Part 63, Subpart AAAAA	See b)(2)c.
g.	40 CFR, Part 63.1 – 63.15	Table 8 to 40 CFR, Part 63, Subpart AAAAA – Applicability of General Provisions to Subpart AAAAA specifies the applicable General Provisions from 40 CFR 63.1 – 63.15.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20; 40 CFR, Part 60, Subpart OOO; 40 CFR, Part 63, Subpart AAAAA; and 60 CFR, Part 63.1 – 63.15.
- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The limestone material handling operation shall be designed and operated in such a manner as to result in the following visible emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
    - (b) Visible fugitive emissions shall not exceed 10% opacity, as a six-minute average, from any emission point associated with this emissions unit that is not fully enclosed within a building.
  - ii. Maintain the high moisture content of the limestone. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall apply water to the limestone at appropriate treatment frequencies.

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



- c. The permittee shall comply with the applicable visible emission limitations and additional restrictions required under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7080	Purpose of the subpart.
63.7081	Subjectivity to the subpart.
63.7082	What parts of the plant does this subpart cover.
63.7083	Compliance dates for the subpart.
63.7090(a)	Table 1 visible emission limitations: Fugitive emissions from all processed stone handling (PSH) operations must not exceed 10% opacity; and/or All PSH operations enclosed in a building must comply with the 10% opacity limitation for fugitive emissions, or there must be no visible emissions from the building, except from a vent; and/or Vent emissions <sup>(1)</sup> from a building enclosing PSH operations must not exceed 0.05 grams per dry standard cubic meter; and Vent emissions <sup>(1)</sup> must not exceed 7% opacity.
63.7090(b)	Table 2 operating limit: Prepare a written operations, maintenance, and monitoring (OM&M) plan and the corrective actions to be taken when required.
63.7100(a) 63.7100(b)	Facility must comply with the emission limitations and operating limits at all times, except during periods of startup, shutdown, and malfunctions.
63.7100(c)	Operating and maintenance requirements.
63.7100(d)	Prepare, implement, and submit a written OM&M plan.
63.7100(e)	Develop and implement a written startup, shutdown, and malfunction plan (SSMP).

\*Pursuant to this rule, a vent means “an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying PM [particulate matter] emissions”.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions required under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7121(c)	Operate in accordance with SSMP during periods of startup, shutdown, and malfunction.
------------	---

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from this emissions unit.



- a. Daily checks shall be performed on the following emission points associated with this emissions unit:
  - i. all operations/emissions points that are not fully enclosed within a building; and
  - ii. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
- b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(1)a.
- c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
- d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
  - i. the color of the emissions;
  - ii. the total duration of any visible emission incident; and
  - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7120	Monitor and collect data to demonstrate continuous compliance.
63.7121(a)	Demonstration of continuous compliance with each emission limitation:
	Monthly, 1-minute VE check for each PSH operation subject to an opacity limit.
	Monthly, VE check of the building for enclosed PSH operations.
63.7121(d)	Deviations that occur during periods of startup, shutdown, and malfunction.
63.7121(e)	Specifications for the monthly, 1-minute VE check for each PSH operation subject to an opacity limit.
63.7132 63.7133	Recordkeeping requirements.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The



quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(1) above:
  - a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point that is not fully enclosed within a building;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 63, Subpart AAAAA, including the following sections:

63.7121(b)	Report deviations of each operating limit, opacity limit, and VE limit, including periods of startup, shutdown, and malfunction.
63.7130 63.7131	Notification and reporting requirements.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

f) Testing Requirements

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



a. Emissions Limitations:

4.65 tons fugitive PE per rolling, 12-month period  
 1.56 tons fugitive PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each operation associated with this emissions unit:

i. Material Transfer/Conveying Operations

tons stone <sup>(1)</sup>	lb pollutant <sup>(2)</sup>	1 ton <sup>(3)</sup>
year	ton	2,000 lbs

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factors for controlled transfer and conveying due to high moisture content of limestone from AP-42, Chapter 11.19.2 (8/2004).

PE	0.00014 lb PE/ton
PM <sub>10</sub>	4.6 x 10 <sup>-5</sup> lb PM <sub>10</sub> /ton

- (3) Conversion factor.

ii. Screening

tons stone <sup>(1)</sup>	lb pollutant <sup>(2)</sup>	1 ton <sup>(3)</sup>
year	ton	2,000 lbs

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factors for controlled screening due to high moisture content of limestone from AP-42, Chapter 11.19.2 (8/2004).

PE	0.0022 lb PE/ton
PM <sub>10</sub>	0.00074 lb PM <sub>10</sub> /ton

- (3) Conversion factor.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



b. Emission Limitation:

Visible fugitive emissions shall not exceed 10% opacity, as a six-minute average, from any emission point associated with this emissions unit that is not fully enclosed within a building.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7110(a)	Dates for performance tests and other initial compliance demonstrations.
63.7111	Requirements for subsequent performance tests.
63.7112	Performance test requirements, design evaluations, and procedures.
63.7114	Demonstration of initial compliance with the emission limitations.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.



**4. P001, Product Handling # 1**

**Operations, Property and/or Equipment Description:**

Product Handling #1: Lime Material Handling with building enclosure(s) and baghouse control (D-136)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b></p> <p>See b)(2)b.</p> <p><b>Fugitive Emissions:</b> There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p><b>Stack Emissions:</b> <u>Baghouse D-136:</u> 0.01 grain (gr) PM<sub>10</sub>/dry standard cubic foot (dscf) &amp; 1.05 pounds PM<sub>10</sub>/hour</p> <p>4.60 tons PM<sub>10</sub> per rolling, 12-month period</p> <p>Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-136.</p>
c.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
e.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The material transfer system shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
  - ii. The material transfer system shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouse D-136 is currently operated in order to meet this requirement.
  - iii. Visible PE shall not exceed 7% opacity, as a six-minute average from the stack serving baghouse D-136.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control

practices for minimizing emissions, and shall comply with the reporting requirements specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving baghouse D-136. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
- a. A separate record shall be kept for each building egress point and/or building surface.
  - b. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
  - c. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
    - i. the color of the emissions;



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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control. At a minimum, the following shall be conducted:
  - a. At least once every calendar quarter, the permittee shall:
    - i. Check the bags/filters for deterioration or degradation;
    - ii. Check the cleaning system for proper operation; and
    - iii. Check the hoppers and conveyance systems for proper operation.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
  - a. all visible emissions checks during which any visible particulate emissions were observed from the stack serving baghouse D-136; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:



- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
- b. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

- a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf (D-136)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- b. Emission Limitation:

1.05 pounds PM<sub>10</sub>/hour (D-136)

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit of the baghouse serving this emissions unit and can be calculated using the following equation:



0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of the baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of the baghouse (D-136 = 12,304 dscfm), as supplied in the permit application.
- (3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

4.60 tons PM<sub>10</sub> per rolling, 12-month period (D-136)

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

1.05 pounds PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Hourly emission rate for the baghouse.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitation, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitation:

Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-136.



Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.



**5. P002, Product Handling # 2**

**Operations, Property and/or Equipment Description:**

Product Handling #2: Lime Material Handling with building enclosure(s) and baghouse control (D-151)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	Best Available Control Technology:  See b)(2)b.  Fugitive Emissions: There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.  Stack Emissions: <u>Baghouse D-151:</u> 0.01 grain (gr) PM <sub>10</sub> /dry standard cubic foot (dscf) & 1.38 pounds PM <sub>10</sub> /hour  6.04 tons PM <sub>10</sub> per rolling, 12-month period  Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-151.
c.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
e.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The material transfer system and screening operations shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
  - ii. The material transfer system and screening operations shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouse D-151 is currently operated in order to meet this requirement.
  - iii. Visible PE shall not exceed 7% opacity, as a six-minute average from the stack serving baghouse D-151.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements

specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving baghouse D-151. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
- a. A separate record shall be kept for each building egress point and/or building surface.
  - b. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
  - c. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
    - i. the color of the emissions;



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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

(5) In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control. At a minimum, the following shall be conducted:

- a. At least once every calendar quarter, the permittee shall:
  - i. Check the bags/filters for deterioration or degradation;
  - ii. Check the cleaning system for proper operation; and
  - iii. Check the hoppers and conveyance systems for proper operation.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

(2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:

- a. all visible emissions checks during which any visible particulate emissions were observed from the stack serving baghouse D-151; and
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

(3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:



- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
- b. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

- a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf (D-151)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- b. Emission Limitation:

1.38 pounds PM<sub>10</sub>/hour (D-151)

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit of the baghouse serving this emissions unit and can be calculated using the following equation:



0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of the baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of the baghouse (D-151 = 16,089 dscfm), as supplied in the permit application.
- (3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

6.04 tons PM<sub>10</sub> per rolling, 12-month period (D-151)

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

1.38 pounds PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Hourly emission rate for the baghouse.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitation, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitation:

Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-151.



Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitation:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.



**6. P901, Solid Fuel Handling**

**Operations, Property and/or Equipment Description:**

Solid Fuel Handling (coal and coke): material receiving, transfer, crushing, and storage with building enclosure(s) and baghouse control (D-191)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	Best Available Control Technology:  See b)(2)b.  Fugitive Emissions: 5.38 tons particulate emissions (PE) per rolling, 12-month period  1.62 tons particulate matter ≤ 10 microns (PM <sub>10</sub> ) per rolling, 12-month period  There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.  There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.  Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the solid fuel receiving operation.  Stack Emissions:



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<u>Baghouse D-191:</u> 0.01 grain (gr) PM <sub>10</sub> /dry standard cubic foot (dscf) & 0.89 pound PM <sub>10</sub> /hour  3.90 tons PM <sub>10</sub> per rolling, 12-month period  Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-191.
c.	OAC rule 3745-17-08(A)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
f.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
g.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The solid fuel receiving, material transfer points, and crusher shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:



- (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
- (b) There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for solid fuel receiving.
- (c) Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the solid fuel receiving operation.
- ii. The material transfer system from the solid fuel hopper and (12) storage tanks to the bucket elevator shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouse D-191 is currently operated in order to meet this requirement.
- iii. Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-191.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving baghouse D-191. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 this emissions unit.
- a. Daily checks shall be performed on the following emission points associated with this emissions unit:
    - i. solid fuel receiving operation;
    - ii. all operations/emissions points, other than the solid fuel receiving operation, that are not fully enclosed within a building; and
    - iii. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
  - b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(2)a.
  - c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
  - d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
    - i. the color of the emissions;
    - ii. the total duration of any visible emission incident; and
    - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouse or emissions unit. In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
- a. all visible emissions checks during which any visible particulate emissions were observed from the stack serving baghouse D-191; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from the solid fuel receiving operation;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point, other than the load-out operation, that is not fully enclosed within a building;
  - c. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - d. any corrective actions taken to minimize or eliminate the visible fugitive emissions.



If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf (D-191)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

b. Emission Limitation:

0.89 pound PM<sub>10</sub>/hour (D-191)

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit of the baghouse serving this emissions unit and can be calculated using the following equation:

0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of the baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of the baghouse (D-191 = 10,411 dscfm), as supplied in the permit application.



(3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

3.90 tons PM<sub>10</sub> per rolling, 12-month period (D-191)

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

0.89 pound PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Hourly emission rate for the baghouse.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitation, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitations:

5.38 tons fugitive PE per rolling, 12-month period  
 1.62 tons fugitive PM<sub>10</sub> per rolling, 12-month period

a) Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each operation associated with this emissions unit that is not fully enclosed within a building and/or is vented to a dust collector that does not achieve 100% capture efficiency:

i. Solid Fuel Receiving



tons fuel <sup>(1)</sup>	0.007 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.30 lb PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for truck dumping from AP-42, Chapter 11.9 (7/98).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application.
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 30% of PE is PM<sub>10</sub>, derived from RACM Section 2.1, page 2-57 (9/80).

ii. **Material Transfer/Conveying Operations**

tons fuel <sup>(1)</sup>	0.02 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.30 lb PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for product transfer and conveying from RACM Section 2.1, pages 2-57 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application.
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 30% of PE is PM<sub>10</sub>, derived from RACM Section 2.1, page 2-57 (9/80).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. **Emission Limitation:**

Visible PE shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-191.



Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f. Emission Limitation:

Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the solid fuel receiving operation.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the procedures specified in OAC rule 3745-17-03(B)(3).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the solid fuel receiving operation.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.



**7. P902, Common Product Handling**

**Operations, Property and/or Equipment Description:**

Common Product Handling: product transfer and screening operations with building enclosure(s) and baghouse control (D-131 and D-135)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b></p> <p>See b)(2)b.</p> <p>Fugitive Emissions:            1.75 tons particulate emissions (PE) per rolling, 12-month period</p> <p>1.52 tons particulate matter ≤ 10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p>There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.</p> <p><b>Stack Emissions:</b>  <u>Baghouse D-131:</u>            0.01 grain (gr) PM<sub>10</sub>/dry standard cubic foot (dscf) &amp; 1.38 pounds PM<sub>10</sub>/hour</p> <p><u>Baghouse D-135:</u></p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.01 gr PM <sub>10</sub> /dscf& 0.39 pound PM <sub>10</sub> /hour <b>Stack Emissions (Cont.):</b> <u>Baghouses D-131 and D-135, combined:</u> 7.75 tons PM <sub>10</sub> per rolling, 12-month period  Visible PE shall not exceed 7% opacity, as a 6-minute average, from the stack serving baghouses D-131 and D-135.
c.	OAC rule 3745-17-08(A)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
f.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
g.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The common product handling, product transfer and screening operations shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:



- (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
  - (b) There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.
  - ii. This emissions unit shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouses D-131 and D-135 are currently operated in order to meet this requirement.
  - iii. Visible PE shall not exceed 7% opacity, as a 6-minute average, from the stack serving baghouses D-131 and D-135.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stacks serving baghouses D-131 and D-135. The presence or absence of

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

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

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 this emissions unit.
  - a. Daily checks shall be performed on the following emission points associated with this emissions unit:
    - i. all operations/emissions points, other than the load-out operation, that are not fully enclosed within a building; and
    - ii. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
  - b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(2)a.
  - c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
  - d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
    - i. the color of the emissions;
    - ii. the total duration of any visible emission incident; and
    - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control. At a minimum, the following shall be conducted:



- a. At least once every calendar quarter, the permittee shall:
  - i. Check the bags/filters for deterioration or degradation;
  - ii. Check the cleaning system for proper operation; and
  - iii. Check the hoppers and conveyance systems for proper operation.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
  - a. all visible emissions checks during which any visible particulate emissions were observed from the stacks serving baghouses D-131 and D-135; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
  - a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point, other than the load-out operation, that is not fully enclosed within a building;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible fugitive emissions.



If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf per baghouse (D-131 and D-135)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

b. Emission Limitations:

1.38 pounds PM<sub>10</sub>/hour (D-131)

0.39 pound PM<sub>10</sub>/hour (D-135)

Applicable Compliance Method:

Each hourly emission limitation represents the potential to emit of the corresponding baghouse serving this emissions unit and can be calculated using the following equation:

0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

(1) Maximum outlet grain loading of each baghouse, as supplied in the permit application.



(2) Maximum outlet gas flow rate of each baghouse (D-131 = 16,089 dscfm and D-135 = 4,543 dscfm), as supplied in the permit application.

(3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

7.75 tons PM<sub>10</sub> per rolling, 12-month period, combined for baghouses D-131 and D-135

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

1.77 pounds PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Combined, hourly emission rate for the baghouses.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitations, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitations:

1.75 tons fugitive PE per rolling, 12-month period  
 1.52 tons fugitive PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each operation associated with this emissions unit that is not fully enclosed within a building and/or is vented to a dust collector that does not achieve 100% capture efficiency:

i. Material Transfer/Conveying Operations



tons lime <sup>(1)</sup>	0.1 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput for each emission point, as indicated in the permit application.
- (2) Emission factor for product transfer and conveying from RACM Section 2.3, page 2-158 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application (98%).
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub>, from RACM Section 2.3, page 2-160 (9/80).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitation:

Visible PE shall not exceed 7% opacity from the stacks serving baghouses D-131 and D-135.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



- g) Miscellaneous Requirements
  - (1) None.



**8. P903, Product Storage/Loadout # 1**

**Operations, Property and/or Equipment Description:**

Product Storage/Load-out #1: product transfer, storage, and railcar load-out with building enclosure(s) and baghouse control (D-138 and D-139)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b></p> <p>See b)(2)b.</p> <p><b>Fugitive Emissions:</b></p> <p>9.64 tons particulate emissions (PE) per rolling, 12-month period</p> <p>8.39 tons particulate matter ≤ 10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p>There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.</p> <p>Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the railcar load-out operation.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p><b>Stack Emissions:</b></p> <p><u>Baghouse D-138:</u> 0.01 grain (gr) PM<sub>10</sub>/dry standard cubic foot (dscf) &amp; 0.52 pound PM<sub>10</sub>/hour</p> <p><u>Baghouse D-139:</u> 0.01 gr PM<sub>10</sub>/dscf &amp; 0.10 pound PM<sub>10</sub>/hour</p> <p><u>Baghouses D-138 and D-139, combined:</u> 2.72 tons PM<sub>10</sub> per rolling, 12-month period</p> <p>Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-138 and D-139.</p>
c.	OAC rule 3745-17-08(A)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
f.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
g.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.



- b. The permittee shall employ best available control technology (BACT) on this emissions unit for the control of particulate emissions. The BACT control requirements for this emissions unit have been identified, as follows:
  - i. The product transfer/conveying, storage, and railcar load-out operations shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
    - (b) There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operation.
    - (c) Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the railcar load-out operation.
  - ii. This emissions unit shall be equipped and operated with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouses D-138 and D-139 are currently operated in order to meet this requirement.
  - iii. Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-138 and D-139.
  - iv. The railcar load-out operation shall be equipped and operated with a telescopic spout with baghouse aspiration, or equivalent load-out spout. Baghouse D-139 is currently operated in order to meet this requirement.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stacks serving baghouses D-138 and D-139. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 this emissions unit.

- a. Daily checks shall be performed on the following emission points associated with this emissions unit:
  - i. railcar load-out operation;
  - ii. all operations/emissions points, other than the load-out operation, that are not fully enclosed within a building; and
  - iii. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
- b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(2)a.
- c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.



- d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
  - i. the color of the emissions;
  - ii. the total duration of any visible emission incident; and
  - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control. At a minimum, the following shall be conducted:
  - a. At least once every calendar quarter, the permittee shall:
    - i. Check the bags/filters for deterioration or degradation;
    - ii. Check the cleaning system for proper operation; and
    - iii. Check the hoppers and conveyance systems for proper operation.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
  - a. all visible emissions checks during which any visible particulate emissions were observed from the stacks serving baghouses D-138 and D-139; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from the railcar load-out operation;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point, other than the load-out operation, that is not fully enclosed within a building;
  - c. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - d. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf per baghouse (D-138 and D-139)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



b. Emission Limitations:

0.52 pound PM<sub>10</sub>/hour (D-138)  
 0.10 pound PM<sub>10</sub>/hour (D-139)

Applicable Compliance Method:

Each hourly emission limitation represents the potential to emit of the corresponding baghouse serving this emissions unit and can be calculated using the following equation:

0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of each baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of each baghouse (D-138 = 6,057 dscfm and D-139 = 1,136 dscfm), as supplied in the permit application.
- (3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

2.72 tons PM<sub>10</sub> per rolling, 12-month period, combined for baghouses D-138 and D-139

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

0.62 pound PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Combined, hourly emission rate for the baghouses.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.



Therefore, provided compliance is shown with the hourly limitations, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitations:

9.64 tons fugitive PE per rolling, 12-month period

8.39 tons fugitive PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each operation associated with this emissions unit that is not fully enclosed within a building and/or is vented to a dust collector that does not achieve 100% capture efficiency:

i. Material Transfer/Conveying Operations

tons lime <sup>(1)</sup>	0.1 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for product transfer and conveying from RACM Section 2.3, page 2-158 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application (98%).
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub>, from RACM Section 2.3, page 2-160 (9/80).

ii. Load-out Operations

tons lime <sup>(1)</sup>	0.25 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for packaging and shipping from RACM Section 2.3, page 2-158 (9/80).



- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application (99%).
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub>, from RACM Section 2.3, page 2-160 (9/80).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitation:

Visible emissions shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-138 and D-139.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f. Emission Limitation:

Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the railcar load-out operation.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the procedures specified in OAC rule 3745-17-03(B)(3).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operation.



Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

(1) None.



**9. P904, Product Storage/Loadout # 2**

**Operations, Property and/or Equipment Description:**

Product Storage/Loadout #2: product transfer, screening, pelletizing, storage, and truck/rail load-out operations with building enclosure(s) and baghouse control (D-152)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b></p> <p>See b)(2)b.</p> <p>Fugitive Emissions:            5.26 tons particulate emissions (PE) per rolling, 12-month period</p> <p>4.58 tons particulate matter ≤ 10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p>There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.</p> <p>Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the truck and rail load-out operations.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p><b>Stack Emissions:</b>  <u>Baghouse D-152:</u></p> <p>0.01 grain (gr) PM<sub>10</sub>/dry standard cubic foot (dscf) &amp; 1.30 pounds PM<sub>10</sub>/hour</p> <p>5.69 tons PM<sub>10</sub> per rolling, 12-month period</p> <p>Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-152.</p>
c.	OAC rule 3745-17-08(A)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
f.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.
g.	40 CFR, Part 64 - Compliance Assurance Monitoring	See d)(1) through d)(3), d)(5) and e)(2)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.



- i. The product transfer/conveying, storage, and railcar load-out operations shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
    - (b) There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operation.
    - (c) Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the truck and railcar load-out operations.
  - ii. This emissions unit shall be equipped and operated with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouse D-152 is currently operated in order to meet this requirement.
  - iii. Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-152.
  - iv. Each truck and railcar load-out operation shall be equipped and operated with a telescopic spout with baghouse aspiration, or equivalent load-out spout. Baghouse D-152 is currently operated in order to meet this requirement.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators, for the baghouse controlling this emissions unit, are daily visible emission checks specified in d)(3) and preventative maintenance inspections specified in d)(5).

When the daily visible emission checks show operation outside of its normal or usual manner of operation, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in e)(2). The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Northwest District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving baghouse D-152. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]

- (4) 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 this emissions unit.

- a. Daily checks shall be performed on the following emission points associated with this emissions unit:
  - i. railcar load-out operation;
  - ii. all operations/emissions points, other than the load-out operation, that are not fully enclosed within a building; and
  - iii. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
- b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(2)a.
- c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.



- d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
  - i. the color of the emissions;
  - ii. the total duration of any visible emission incident; and
  - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) In addition to daily visible emission checks from the baghouse stack, the permittee also has a preventative maintenance schedule in place to ensure effective emissions control. At a minimum, the following shall be conducted:
  - a. At least once every calendar quarter, the permittee shall:
    - i. Check the bags/filters for deterioration or degradation;
    - ii. Check the cleaning system for proper operation; and
    - iii. Check the hoppers and conveyance systems for proper operation.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
  - a. all visible emissions checks during which any visible particulate emissions were observed from the stack serving baghouse D-152; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1), PTI No. P0115519 and 40 CFR, Part 64]



- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from the railcar load-out operation;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point, other than the load-out operation, that is not fully enclosed within a building;
  - c. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - d. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf (D-152)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



b. Emission Limitation:

1.30 pounds PM<sub>10</sub>/hour (D-152)

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit of the baghouse serving this emissions unit and can be calculated using the following equation:

0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of the baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of the baghouse (D-152 = 15,143 dscfm), as supplied in the permit application.
- (3) Conversion factors.

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

5.69 tons PM<sub>10</sub> per rolling, 12-month period (D-152)

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

1.30 pounds PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Hourly emission rate for the baghouse.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.



Therefore, provided compliance is shown with the hourly limitation, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitations:

5.26 tons fugitive PE per rolling, 12-month period  
 4.58 tons fugitive PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each operation associated with this emissions unit that is not fully enclosed within a building and/or is vented to a dust collector that does not achieve 100% capture efficiency:

i. Material Transfer/Conveying Operations

tons lime <sup>(1)</sup>	0.1 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for product transfer and conveying from RACM Section 2.3, pages 154-171 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application (98%).
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub>, from RACM Section 2.3, pages 154-171 (9/80).

ii. Load-out Operations

tons lime <sup>(1)</sup>	0.25 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application (1,752,000 tons).
- (2) Emission factor for packaging and shipping from RACM Section 2.3, pages 154-171 (9/80).



- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application (99%).
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub> [RACM Section 2.3, pages 154-171 (9/80)].

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitation:

Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stack serving baghouse D-152.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f. Emission Limitation:

Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the truck and railcar load-out operations.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the procedures specified in OAC rule 3745-17-03(B)(3).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operations.



Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

- (1) None.



**10. P905, Kiln Dust Handling**

**Operations, Property and/or Equipment Description:**

Lime Kiln Dust (LKD) Handling Operation – including (1) box/dump truck load-out operation and (1) pneumatic/dry bulk tank truck load-out operation

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b></p> <p>See b)(2)b.</p> <p><b>Fugitive Emissions:</b></p> <p>4.01 tons particulate emissions (PE) per rolling, 12-month period</p> <p>3.49 tons particulate matter ≤ 10 microns (PM<sub>10</sub>) per rolling, 12-month period</p> <p>There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.</p> <p>There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building.</p> <p>Visible fugitive emissions shall not exceed 10% opacity from the truck load-out operations.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p><b>Stack Emissions:</b></p> <p><u>Baghouse D-188.1 (LKD silo):</u> 0.01 grain (gr) PM<sub>10</sub>/dry standard cubic foot (dscf) &amp; 0.17 pound PM<sub>10</sub>/hour</p> <p><u>Baghouse D-188.2 (LKD silo):</u> 0.01 gr PM<sub>10</sub>/dscf &amp; 0.17 pound PM<sub>10</sub>/hour</p> <p><u>Baghouse D-189 (load-out):</u> 0.01 gr PM<sub>10</sub>/dscf &amp; 0.10 pound PM<sub>10</sub>/hour</p> <p><u>Baghouses D-188.1, D-188.2, and D-189, combined:</u> 1.93 tons PM<sub>10</sub> per rolling, 12-month period</p> <p>Visible PE shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-188.1, D-188.2, and D-189.</p>
c.	OAC rule 3745-17-08(A)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-07(B).
d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
f.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitations established pursuant to OAC rules 3745-31-10 through 20.

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20.
  - i. The material transfer points and truck load-out operations shall be designed and operated in such a manner as to result in the following visible fugitive emission restrictions:
    - (a) There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.
    - (b) There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operation.
    - (c) Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the truck load-out operations.
  - ii. The lime kiln dust (LKD) silo and pneumatic material transfer system leading to the silo shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouses D-188.1 and D-188.2 are currently operated in order to meet this requirement.
  - iii. Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-188.1, D-188.2, and D-189.
  - iv. The box/dump truck load-out operation shall be equipped with a pug mill that sufficiently wets the LKD material prior to load-out.
  - v. The pneumatic/dry bulk tank truck load-out operation shall be equipped with baghouse control capable of achieving 0.01 gr PM<sub>10</sub>/dscf. Baghouse D-189 is currently operated in order to meet this requirement.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse discharges serving baghouses D-188.1, D-188.2, and D-189. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;



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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (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 this emissions unit.
  - a. Daily checks shall be performed on the following emission points associated with this emissions unit:
    - i. box/dump truck load-out operation;
    - ii. pneumatic/dry bulk tank truck load-out operation;
    - iii. all operations/emissions points, other than the load-out operations, that are not fully enclosed within a building; and
    - iv. all egress points associated with the building enclosure serving this emissions unit. It would be acceptable to observe each side of the building and roof for visible fugitive emissions.
  - b. A separate record shall be kept for each operation, building egress point, and/or building surface specified in d)(2)a.
  - c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
  - d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
    - i. the color of the emissions;
    - ii. the total duration of any visible emission incident; and
    - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any



corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:
- a. all visible emissions checks during which any visible particulate emissions were observed from the stacks serving baghouses: D-188.1, D-188.2, and D-189 that are associated with this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(2) above:
- a. all visible fugitive emissions checks during which any visible fugitive emissions were observed from the box/dump truck load-out operation;
  - b. all visible fugitive emissions checks during which any visible fugitive emissions were observed from the pneumatic/dry bulk tank truck load-out operation;
  - c. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any operation/emission point, other than the load-out operations, that is not fully enclosed within a building;
  - d. all visible fugitive emissions checks during which any visible fugitive emissions were observed from any egress point associated with the building enclosure serving this emissions unit; and
  - e. any corrective actions taken to minimize or eliminate the visible fugitive emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



- (4) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitations:

0.01 grain PM<sub>10</sub>/dscf per baghouse (D-188.1, D-188.2, and D-189)

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

b. Emission Limitations:

0.17 pound PM<sub>10</sub>/hour (D-188.1)  
 0.17 pound PM<sub>10</sub>/hour (D-188.2)  
 0.10 pound PM<sub>10</sub>/hour (D-189)

Applicable Compliance Method:

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

0.01 gr PM <sub>10</sub> <sup>(1)</sup>	dscf <sup>(2)</sup>	1 pound <sup>(3)</sup>	60 minutes <sup>(3)</sup>
dscf	minute	7,000 grains	hour

Where:

- (1) Maximum outlet grain loading of each baghouse, as supplied in the permit application.
- (2) Maximum outlet gas flow rate of each baghouse (D-188.1 = 2,000 dscfm; D-188.2 = 2,000 dscfm; and D-189 = 1,200 dscfm), as supplied in the permit application.
- (3) Conversion factors.



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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

c. Emission Limitation:

1.93 tons PM<sub>10</sub> per rolling, 12-month period, combined for baghouses D-188.1, D-188.2, and D-189

Applicable Compliance Method:

The annual emission limitation was calculated using the following equation:

0.44 pound PM <sub>10</sub> <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- (1) Combined, hourly emission rate for the baghouses.
- (2) Maximum annual operating scheduled.
- (3) Conversion factor.

Therefore, provided compliance is shown with the hourly limitations, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

d. Emission Limitations:

4.01 tons PE per rolling, 12-month period  
 3.49 tons PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method:

Compliance with the fugitive emission limitations shall be determined using the following fugitive emission calculations for each material transfer/conveying operation associated with this emissions unit:

i. Material Transfer/Conveying Operations

tons LKD <sup>(1)</sup>	0.1 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:



- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for product transfer and conveying from RACM Section 2.3, pages 154-171 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application.
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub>, from RACM Section 2.3, pages 154-171 (9/80).

ii. Load-out Operations

tons LKD <sup>(1)</sup>	0.25 lb PE <sup>(2)</sup>	1-CE <sup>(3)</sup>	1 ton <sup>(4)</sup>	0.87 PM <sub>10</sub> <sup>(5)</sup>
year	ton		2,000 lbs	PE

Where:

- (1) Maximum annual material throughput, as indicated in the permit application.
- (2) Emission factor for packaging and shipping from RACM Section 2.3, pages 154-171 (9/80).
- (3) CE = control efficiency for the reduction of fugitive particulate emissions, as indicated in the permit application.
- (4) Conversion factor.
- (5) To estimate fugitive PM<sub>10</sub> emissions, assume 87% of PE is PM<sub>10</sub> [RACM Section 2.3, pages 154-171 (9/80)].

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

e. Emission Limitation:

Visible particulate emissions shall not exceed 7% opacity, as a six-minute average, from the stacks serving baghouses D-188.1, D-188.2, and D-189.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



f. Emission Limitation:

Visible fugitive emissions shall not exceed 10% opacity, as a three-minute average, from the truck and railcar load-out operations.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources") and the procedures specified in OAC rule 3745-17-03(B)(3).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g. Emission Limitations:

There shall be no visible fugitive emissions from any building egress point enclosing any operation associated with this emissions unit.

There shall be no visible fugitive emissions from any operation associated with this emissions unit that is not fully enclosed within a building, except for the load-out operations.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22, as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

g) Miscellaneous Requirements

(1) None.



**11. P906, Truck Loading Operation; Mobile Transloader**

**Operations, Property and/or Equipment Description:**

Truck product loading operation utilizing a diesel-powered mobile transloader with dust collector

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) [PTI No. P0118832, issued 4/30/15]	0.007 gr filterable particulate matter less than or equal to 10 microns (PM <sub>10</sub> )/dscf; 0.18 ton PM <sub>10</sub> /year from dust collector stack  0.79 ton fugitive particulate emissions (PE)/year  Visible particulate emissions shall not exceed 5% opacity as a 6-minute average from the dust collector stack  Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average.  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)	See b)(2)d.
e.	OAC rule 3745-17-08(B)	This emissions unit 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), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-17-07(B)	Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.
g.	OAC rule 3745-17-11(B)(5)(a)	0.310 lb particulate matter per million Btu of actual heat input for a stationary small internal combustion engine
h.	OAC rule 3745-18-06(G)	is emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B).
i.	40 CFR, Part 60, Subpart IIII (40 CFR 60.4200-4219)  [In accordance with 60.4219, the diesel-powered mobile transloader that is part of this emissions unit is a stationary internal combustion engine and is subject to the applicable emissions limitations/control requirements specified in this section.]	See b)(2)e, b)(2)f, c)(3) and c)(4).
j.	40 CFR 60.1 through 60.19	Table 8 to 40 CFR, Part 60, Subpart IIII – Applicability of General Provisions to Subpart IIII shows which parts of the General Provisions in 40 CFR 60.1 – 60.19 apply.
k.	OAC rule 3745-110-03	See b)(2)g.

(2) Additional Terms and Conditions

- a. PTI #P0118832 established the following legally and practically enforceable emission for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restriction contained in section c)(1):
  - i. use of a dust collector achieving a maximum outlet concentration of 0.007 gr PM<sub>10</sub>/dscf and a 99% capture efficiency;
  - ii. a visible emission restriction (associated with the maximum outlet concentration) not to exceed 5% opacity, as a 6-minute average from the dust collector stack; and
  - iii. a visible fugitive emission restriction (associated with the dust collector capture efficiency) not to exceed 20% opacity, as a 3-minute average.



All emissions of particulate matter from the dust collector stack are PM<sub>10</sub>. For purposes of major new source review all emissions of fugitive particulate matter are assumed to be PM<sub>10</sub>.

- b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F).

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits and control measures no longer apply.

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

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of PM<sub>10</sub> from the small diesel engine and transloading operations, since the potential to emit is less than 10 tons per year, taking into account the legally and practically enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

Potential emissions from the engine were calculated by multiplying the appropriate emissions factor from AP-42 3.3-1(revised 10/96) for small diesel IC engines, by a maximum engine power rating of 31 horsepower and a maximum operating schedule of 8,760 hours/year. Emissions factors and potential annual emissions for each pollutant are identified below:

NO <sub>x</sub>	0.031 lb/hp-h	4.20 tons/year
SO <sub>2</sub>	0.00205 lb/hp-h	0.26 ton/year
CO	0.00668 lb/hp-h	0.92 ton/year
OC	0.00247 lb/hp-h	0.35 ton/year



PM <sub>10</sub>	0.00220 lb/hp-h	0.30 ton/year
------------------	-----------------	---------------

- d. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to the voluntary restrictions contained in this permit.
- e. In accordance with 40 CFR 60.4200(a)(1)(i), this emissions unit is subject to 40 CFR, Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion. The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart IIII. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A. (General Provisions) as identified in Table 8 of 40 CFR, Part 60, Subpart IIII.
- f. The permittee shall comply with the applicable emission standards under 40 CFR, Part 60, Subpart IIII including the following sections:

60.4204(b)	Owners and operators of 2007 model year and later non-emergency stationary compression ignition internal combustion engine (CI ICE) with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. This includes compliance with 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.105 and 40 CFR 1039.115 for all pollutants, for the same model year and maximum engine power.
60.4206	Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine.
60.4211(c)	Engine purchase and certification requirements

- g. This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(3).

c) Operational Restrictions

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



- a. use of a dust collector achieving a maximum outlet concentration of 0.007 gr PM<sub>10</sub>/dscf and a 99% capture efficiency.

[OAC rule 3745-77-07(A)(1) and PTI No. P0118832]

- (2) The permittee shall combust only diesel fuel that meets the per gallon standards of 40 CFR 80.510(b).

[OAC rule 3745-77-07(A)(1) and PTI No. P0118832]

- (3) The permittee shall comply with the following fuel requirements under 40 CFR, Part 60, Subpart IIII including the following section:

60.4207(b)	Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
------------	--

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 60, Subpart IIII]

- (4) The permittee shall comply with the following operational restrictions under 40 CFR, Part 60, Subpart IIII including the following sections:

60.4211(a)(1)	Operate and maintain the CI ICE according to the manufacturer's emission-related written instructions.
60.4211(a)(2)	Change only those emission-related settings that are permitted by the manufacturer.
60.4211(a)(3)	Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 60, Subpart IIII]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the dust collector stack and for any visible fugitive particulate emissions from this emissions unit.

The presence or absence of any visible emissions from the dust collector shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

The presence or absence of any visible fugitive particulate emissions from this emissions unit shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- d. the location and color of the emissions;
- e. whether the emissions are representative of normal operations;
- f. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- g. the total duration of any visible emission incident; and
- h. any corrective actions taken to minimize or eliminate the visible emissions.
- i. if visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible fugitive particulate emission incident under item (g) above or continue the daily check until the incident has ended. The observer may indicate that the visible fugitive particulate emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible fugitive particulate emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible fugitive particulate emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

- (2) For each day during which the permittee burns a fuel other than diesel fuel as specified in c)(1), the permittee shall maintain a record of the type, quantity and documentation of the sulfur content of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

- (3) The permittee shall use records of fuel supplier certification to demonstrate compliance with the operational restriction in c)(1). Records of fuel supplier certification shall include the following information:
  - a. The name of the oil supplier; and



- b. a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in c)(2).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that identify:

- a. all days during which any visible particulate emissions were observed from the dust collector stack serving this emissions unit;
- b. all days during which any visible fugitive particulate emissions were observed from this emissions unit; and
- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the dust collector and/or visible fugitive particulate emissions from this emissions unit.

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.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

f) Testing Requirements

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

- a. Emission Limitation:

0.007 gr filterable PM<sub>10</sub>/dscf

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading for the dust collector. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]



b. Emission Limitation:

0.18 ton filterable PM<sub>10</sub>/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.007 gr filterable PM<sub>10</sub>/dscf and the maximum volumetric air flow rate (600 acfm) from this emissions unit to the fabric filter, and using the following conversion factors in order to convert to tons per year: 1 pound/7,000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.007 gr filterable PM<sub>10</sub>/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

c. Emission Limitation:

0.79 ton fugitive PE/year

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be demonstrated by multiplying an emission factor from AP-42 Table 11.17-4 (revised 2/98) of 0.61 pound PE/ton, a maximum throughput of 30 tons/hour, a maximum operating schedule of 8,760 hours/year, a conversion factor of 1 ton/2,000 pounds, and applying a 99% dust collector capture efficiency.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

d. Emission Limitation:

0.310 pound particulate matter per million Btu of actual heat input for a stationary small internal combustion engine

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.310 pound/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]



e. Emission Limitations:

Visible PE shall not exceed 5% opacity, as a 6-minute average from the dust collector stack.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

f. Emission Limitations:

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

Applicable Compliance Method:

If required, compliance shall be determined by visible emission observations performed in accordance with U.S. EPA Method 9 and the modifications listed in paragraph (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03(B)(3).

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]

g) **Miscellaneous Requirements**

(1) PTI# P0118832 allows for the use of a single mobile transloader to perform truck loading operations addressed by this permit. Additionally this permit only allows the truck loading operations to be performed by one of the following mobile transloaders:

a. mobile transloader identified by serial number 09042128-210;

or

b. mobile transloader identified by serial number 90519520

The use of two transloaders at the same time would constitute a "modification", as defined by OAC rule 3745-31-01, of the truck loading operation allowed by this permit. The use of mobile transloaders other than those identified above would constitute a new emissions unit, as defined by OAC rule 3745-31-01. Any modification and/or installation of a new emissions unit would require the permittee to apply for and obtain a new or modified permit to install prior to engaging in such modification and/or installation.

[OAC rule 3745-77-07(C)(1) and PTI No. P0118832]



**12. Emissions Unit Group – Rotary Lime Kilns: P003 & P004**

EU ID	Operations, Property and/or Equipment Description
P003	Rotary lime kiln #1 with cooler and baghouse D-185 (P003 and P004 share a common stack)
P004	Rotary lime kiln #2 with cooler and baghouse D-285 (P003 and P004 share a common stack)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rules 3745-31-10 through 20 [PTI No. P0115519, issued 12/18/14]	<p><b>Best Available Control Technology:</b> See b)(2)b.</p> <p>0.021 grain (gr) particulate matter 10 microns or less in size (PM<sub>10</sub>)/dry standard cubic foot (dscf)</p> <p>14.23 pounds PM<sub>10</sub>/hour &amp; 62.33 tons PM<sub>10</sub> per rolling, 12-month period</p> <p>1,234.90 pounds nitrogen oxides (NO<sub>x</sub>)/hour &amp; 5,408.90 tons NO<sub>x</sub> per rolling, 12-month period</p> <p>1,102.00 pounds sulfur dioxide (SO<sub>2</sub>)/hour &amp; 4,826.80 tons SO<sub>2</sub> per rolling, 12-month period</p> <p>270.83 pounds carbon monoxide (CO)/hour &amp; 1,186.23 tons CO per rolling, 12-month period</p> <p>16.25 pounds volatile organic compounds (VOC)/hour &amp; 71.17 tons VOC per rolling, 12-month period</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.005 pound lead (Pb)/hour & 0.02 ton Pb per rolling 12-month period  Visible particulate emissions shall not exceed 15% opacity, as a six-minute average, from the stack serving baghouses D-185 and D-285.
c.	OAC rule 3745-17-11(B)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rules 3745-31-10 through 20.
d.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rules 3745-31-10 through 20.
e.	OAC rule 3745-18-80(B)	The permittee shall not cause or permit the emission of SO <sub>2</sub> to exceed a maximum of 34.0 pounds SO <sub>2</sub> per ton of actual process weight input.
f.	40 CFR, Part 63, Subpart AAAAA (63.7080 through 63.7143)	See 63.7090  0.12 pound particulate matter (PM) per ton stone feed from kiln/cooler  See b)(2)c and b)(2)d.
g.	40 CFR, Part 63.1 – 63.15	Table 8 to 40 CFR, Part 63, Subpart AAAAA – Applicability of General Provisions to Subpart AAAAA specifies the applicable General Provisions from 40 CFR 63.1 – 63.15.
h.	40 CFR, Part 64	Exempt pursuant to 40 CFR 64.2(b)(i)

(2) Additional Terms and Conditions

- a. The requirements of this rule include compliance with the requirements of OAC rules 3745-31-10 through 20 and OAC rule 3745-18-80(B).



- b. The permittee shall employ best available control technology (BACT) on this emissions unit. BACT has been determined to be the following:
  - i. Control requirements:
    - (a) The permittee shall employ a baghouse with a maximum outlet grain loading of 0.021 gr PM<sub>10</sub>/dscf. Baghouses D-185 and D-285 are currently employed during the operation of emissions units P003 and P004, respectively, to meet this requirement.
    - (b) Based on the BACT analysis, it was determined that there are no cost-effective control technologies for NO<sub>x</sub>, SO<sub>2</sub>, CO, or VOC.
  - ii. Emissions limitations:
    - (a) 0.021 gr PM<sub>10</sub>/dry standard cubic foot (dscf);
    - (b) 14.23 pounds PM<sub>10</sub>/hour & 62.33 tons PM<sub>10</sub> per rolling, 12-month period;
    - (c) 1,234.90 pounds NO<sub>x</sub>/hour & 5,408.90 tons NO<sub>x</sub> per rolling, 12-month period;
    - (d) 1,102.00 pounds SO<sub>2</sub>/hour & 4,826.80 tons SO<sub>2</sub> per rolling, 12-month period;
    - (e) 270.83 pounds CO/hour & 1,186.23 tons CO per rolling, 12-month period;
    - (f) 16.25 pounds VOC/hour & 71.17 tons VOC per rolling, 12-month period;
    - (g) 0.005 pound Pb/hour & 0.02 ton Pb per rolling 12-month period;
    - (h) Visible particulate emissions shall not exceed 15% opacity, as a six-minute average, from the stack serving baghouses D-185 and D-285.
- c. The visible emission limitation specified by this rule is equivalent to the visible emission limitation established pursuant to OAC rules 3745-31-10 through 20.
- d. The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart AAAAA (MACT for Lime Manufacturing Plants), including the following sections:

63.7090(a) and Table 1 of Subpart AAAAA of Part 63	Emission limitations
63.7090(b) and Table 2 of Subpart AAAAA of Part 63	Operating limitations



63.7100	General requirements
---------	----------------------

c) Operational Restrictions

- (1) The permittee shall only burn coal, petroleum coke, and/or natural gas in this emissions unit, unless otherwise approved by the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(A)(1) and PTI No. P0115519]

- (2) The maximum sulfur content of the coal burned in this emissions unit shall not exceed 5.50 percent, by weight.

[OAC rule 3745-77-07(A)(1) and PTI No. P0115519]

- (3) The maximum sulfur content of the coke burned in this emissions unit shall not exceed 6.50 percent, by weight.

[OAC rule 3745-77-07(A)(1) and PTI No. P0115519]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect or require the coal and coke supplier(s) to collect a representative grab sample for each shipment of coal and/or coke that is received for burning in this emissions unit.

The permittee shall perform or require the supplier(s) to perform the analysis of sulfur content (in percent, by weight) in accordance with the most recent version of the following ASTM methods:

- a. ASTM Method D3177, Total Sulfur in the Analysis Sample of Coal and Coke; or
- b. 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.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall maintain monthly fuel records that include the following:

- a. the total quantity of coal received;
- b. the total quantity of petroleum coke received; and
- c. the results of the sulfur content analyses of each coal and coke shipment (in percent, by weight).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



- (3) For each day during which the permittee burns a fuel other than coal, coke, or natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. Daily checks shall be performed to demonstrate the capture of all particulate emissions associated with the operation of the kiln/cooler:

- a. Daily checks shall be performed on the following:
  - i. kiln operations; and
  - ii. the building housing cooler operations.
- b. A separate record shall be kept for each operation specified in d)(1)a.
- c. The presence or absence of any visible fugitive emissions shall be noted in an operations log.
- d. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
  - i. the location and color of the emissions;
  - ii. the total duration of any visible emission incident; and
  - iii. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (5) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7113(a)	Install, operate, and maintain a continuous opacity monitoring system (COMS)
63.7113(g)	Monitoring installation, operation, and maintenance requirements
63.7120, 63.7121 and Tables 5 and 6 of Subpart AAAAA of Part 63.	Continuous compliance requirements
63.7132 and 63.7133	Recordkeeping requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than coal, coke, or natural gas in this emissions, unless that fuel was approved by the appropriate Ohio EPA District Office or local air agency. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (3) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible emissions in term d)(1) above:

- a. all visible emissions checks during which any visible particulate emissions were observed from kiln and/or cooler operations; and
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (4) The permittee shall identify the following information in the quarterly report in accordance with the monitoring requirements for visible fugitive emissions in term d)(4) above:

- a. all visible emissions checks during which any visible fugitive particulate emissions were observed from kiln and/or cooler operations; and
- b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If there are no day(s) and/or corrective actions(s) to identify, as required above, the permittee shall indicate that no visible fugitive emissions were observed and/or that no corrective actions were taken.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



- (5) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (6) The permittee shall comply with the applicable notification and reporting requirements required under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7130	Notification requirements
63.7131 and Table 7 of Subpart AAAAA of Part 63	Reporting requirements

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

- (7) In accordance with 40 CFR Part 63.7131(b), the compliance report shall be submitted on a quarterly basis.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

f) Testing Requirements

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

a. Emission Limitation:

0.021 gr PM<sub>10</sub>/dscf

Applicable Compliance Method:

Compliance with the above emission limitation shall be based on the results of emission testing. The emissions testing shall be conducted once every 5 years in accordance with 40 CFR, Part 63, Subpart AAAAA, term f)(2) below. Compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart AAAAA]

b. Emission Limitation:

14.23 pounds PM<sub>10</sub>/hour

Applicable Compliance Method:

Compliance with the above emission limitation shall be based on the results of emission testing. Compliance with this emission limitation shall be demonstrated



in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4 and in 40 CFR, Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart AAAAA

c. Emission Limitations:

- 1,234.90 pounds NO<sub>x</sub>/hour
- 1,102.00 pounds SO<sub>2</sub>/hour
- 270.83 pounds CO/hour
- 16.25 pounds VOC/hour
- 0.005 pound lead/hour

Applicable Compliance Method:

Compliance with the hourly emissions limitations shall be based on the results of emission testing in accordance with term f)(3) below.

[OAC rule 3745-77-07(C)(1)]

d. Emission Limitations:

- 62.33 tons PM<sub>10</sub> per rolling, 12-month period
- 5,408.90 tons NO<sub>x</sub> per rolling, 12-month period
- 4,826.80 tons SO<sub>2</sub> per rolling, 12-month period
- 1,186.23 tons CO per rolling, 12-month period
- 71.17 tons VOC per rolling, 12-month period
- 0.02 ton Pb per rolling, 12-month period

Applicable Compliance Method:

The 12-month, rolling emission limitations were calculated using the following equation:

pounds pollutant <sup>(1)</sup>	8,760 hours <sup>(2)</sup>	1 ton <sup>(3)</sup>
hour	year	2,000 pounds

Where:

- <sup>(1)</sup> Established hourly emission rate.
- <sup>(2)</sup> Maximum annual operating scheduled.
- <sup>(3)</sup> Conversion factor.

Therefore, provided compliance is shown with the hourly limitation, compliance with the rolling, 12-month emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]



e. Emission Limitation:

Visible PE shall not exceed 15% opacity, as a six-minute average, from the stack serving baghouses D-185 and D-285.

Applicable Compliance Method:

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0115519]

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR, Part 63, Subpart AAAAA, including the following sections:

63.7110	Initial compliance/performance tests
63.7111, 63.7112, and Table 4 of Subpart AAAAA of Part 63	Performance test frequency and requirements
63.7114 and Table 3 of Subpart AAAAA of Part 63	Demonstration of initial compliance

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart AAAAA; and PTI No. P0115519]

- (3) The permittee shall conduct, or have conducted, emission testing for emissions units P003 and P004 in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of the permit (following the effective date for the Title V permit). Subsequent emissions testing requirements shall be evaluated after completion of the 6 month testing in accordance with Ohio EPA Engineering Guide No. 16.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC and lead, in the appropriate averaging period(s).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

<u>Pollutant</u>	<u>Test Method</u>	<u>Location in CFR</u>
NO <sub>x</sub>	1 – 4, and 7	40 CFR, Part 60, Appendix A
SO <sub>2</sub>	1 – 4, and 6	40 CFR, Part 60, Appendix A
CO	1 – 4, and 10	40 CFR, Part 60, Appendix A
VOC	1 – 4, and 18, 25 or 25A	40 CFR, Part 60, Appendix A
Lead	1 – 4, and 29	40 CFR, Part 60, Appendix 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 under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

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).

- e. 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.
- f. 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 of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**13. Emissions Unit Group - 160 HP engines: P020, P021**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P020	160 HP diesel-fired engine #1
P021	160 HP diesel-fired engine #2

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3) [PTI No. P0117693, issued 12/2/14]	1.80 lbs nitrogen oxides (NOx)/hr & 7.88 tons NOx/yr, individually  See b)(2)d.
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.310 lb PE/mmBtu actual heat input, individually
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	40 CFR, Part 60, Subpart IIII	See b)(2)b.
f.	40 CFR, Part 63, Subpart ZZZZ (40 CFR 63.6580 – 63.6675)  [In accordance with 40 CFR 63.6590(a)(1)(ii) these emissions units are existing emergency compression ignition stationary reciprocating internal combustion engines at a major source of HAP emissions].	Standards – 40 CFR 63.6602 – See b)(2)c.  See c)(1), d)(1), e)(1), and f)(2)
g.	40 CFR 63.1 – 16 (40 CFR 63.6665)	Table 8 to Subpart ZZZZ of 40 CFR, Part 63 – Applicability of General Provisions to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 – 16 apply.



(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).
- b. Emissions units P020 and P021 were manufactured prior to July 11, 2005, and are therefore, not applicable to the requirements of 40 CFR, Part 60, Subpart IIII.
- c. The permittee shall comply with the applicable standards required for all affected sources at an existing facility pursuant to 40 CFR 63.6602. Pursuant to this regulation, these emission units shall meet the requirements as stated in Table 2c of 40 CFR, Part 63, Subpart ZZZZ– Requirements for Existing Compression Ignition Stationary Rice Located at a Major Source of HAP emissions and Existing Spark Ignition Stationary Rice less than or equal to 500 HP located at a Major Source of HAP Emissions – Item #1. The permittee shall comply with the following:

63.6605(a) & (b)	General compliance
63.6640(a) & (f)	Continuous compliance

- d. Based on emissions factors from AP-42 Chapter 3.3, table 3.3-1, Emission Factors for uncontrolled gasoline and diesel industrial engines, and a maximum heat input of 0.4071 mmBtu/hr for each engine, emissions from particulate matter less than 10 microns in size (PM10), Organic Compounds (OC), sulfur dioxide (SO2), and Carbon Monoxide (CO) have been determined to be negligible, therefore, no limits are being established for these pollutants under OAC rule 3745-31-05(A)(3) at this time.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart ZZZZ, including the following sections:

63.6625(e) and (h)	Operation requirements
--------------------	------------------------

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart ZZZZ; and PTI No. P0117693]

- (2) The permittee shall burn only number two fuel oil in this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI No. P0117693]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart ZZZZ, including the following sections:



63.6625(f) and (i)	Monitoring requirements
63.6655 (a),(d), (e), and (f)	Recordkeeping
63.6660 (a) through (c)	Records retention

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart ZZZZ; and PTI No. P0117693]

- (2) For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0117693]

e) Reporting Requirements

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart ZZZZ, including the following sections:

63.6640(b) and (e) & 63.6650(f)	Reporting requirements
---------------------------------	------------------------

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart ZZZZ; and PTI No. P0117693]

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

[OAC rule 3745-77-07(C)(1) and PTI No. P0117693]

f) Testing Requirements

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

a. Emission Limitation:

PE shall not exceed 0.310 lb/mmBtu, individually

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and PTI No. P0117693]



b. Emission Limitation:

Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI No. P0117693]

c. Emission Limitation:

1.80 lbs NOx/hr & 7.88 tons NOx/yr, individually

Applicable Compliance Method:

Compliance with the hourly NOx limitation was determined by multiplying the maximum heat input of 0.4071mmBtu/hr by an emission factor of 4.41 lbs NOx/mmBtu (AP-42 Section 3.3 [10/96]). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The annual NOx limitation was determined by multiplying the allowable hourly emission rate by the maximum annual operating schedule of 8,760 hours per year and dividing by 2,000 lbs. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emissions limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI No. P0117693]

- (2) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart ZZZZ, including the following sections:

63.6605(a) and (b)	General compliance requirements
63.6640 (a), and (f)(1), (f)(2), & (f)(3)	Continuous compliance
6365.95 (a)	Compliance Dates

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart ZZZZ; and PTI No. P0117693]

g) Miscellaneous Requirements

- (1) None.