



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
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TELE: (614) 644-3020 FAX: (614) 644-2329

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Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

07/25/03

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

03-74-00-0010
Carmeuse Ohio, Inc. - Maplegrove Lime Plant
Ed Banfield
659 Anderson Rd
P.O. Box 128
Woodville, OH 43469-0128

Dear Ed Banfield:

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

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

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

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA (electronically submitted)
File, DAPC PMU
Northwest District Office
Michigan



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 07/25/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 03-74-00-0010 to:
 Carmeuse Ohio, Inc. - Maplegrove Lime Plant
 Carmeuse Lime, Inc. - Maple Grove
 1967 County Road # 42
 Bettsville, OH 44815

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

F001 (Roadways & Parking) Roadways and parking areas	Rotary Kiln # 12 and cooler	Product Storage and loadout # 1
F003 (Limestone Handling) Conveying, screening, and transfer	P004 (# 13 Kiln) Rotary Kiln # 13 and cooler	P904 (Product Storage/Loadout # 2) Product Storage and loadout # 2
P001 (Product Handling # 1) Conveying and transfer	P901 (Solid Fuel Handling) Unloading, conveying, transfer, and storage of solid fuels	P905 (Kiln Dust Handling) Pneumatic conveying and loadout
P002 (Product Handling # 2) Conveying, transfer, screening, and briquetter	P902 (Common Product Handling) Conveying, transfer, and screening	Z004 (Material Storage Piles) Storage piles for limestone, coke, and coal
P003 (# 12 Kiln)	P903 (Product Storage/Loadout # 1)	

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

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

 Christopher Jones
 Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

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

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

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

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

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

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

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

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

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

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

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

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

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

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

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

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

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in

the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

1. 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
2. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

4. Title IV Provisions

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

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

5. Severability Clause

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

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is

later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

13. Permit Shield

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

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is

not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

15. Emergencies

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

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

16. Off-Permit Changes

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

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

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that

Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been

or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by

Facility Name: Carmeuse Ohio, Inc. - Maplegrove Lime Plant
Facility ID: 03-74-00-0010

January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

Packaging and Shipping (Z013);
Storage Tanks (Z015);
Maintenance Activities (Z016);
Laboratory (Z017);
Utilities (Z018); and
Parts Cleaners (Z019).

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways & Parking (F001)
Activity Description: Roadways and parking areas

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
roadways and parking areas	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	5.70 tons particulate emissions (PE)/yr 1.14 tons particulate matter less than 10 microns in size (PM10)/yr The requirements of this rule also include compliance with the requirements of 40 CFR 52.21 and OAC rules 3745-31-10 through 20.
paved roadways and parking areas (see A.I.2.a)	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	no visible PE except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.c, and A.I.2.e through A.I.2.i)
unpaved roadways and parking areas (see A.I.2.b)	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	no visible PE except for 3 minutes during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.d through A.I.2.h)
	40 CFR 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08(B) OAC rule 3745-17-07(B)(1)	See A.I.2.i. See A.I.2.j. See A.I.2.k. See A.I.2.l.

2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
- paved roadways: all paved roadways
- paved parking areas: all paved parking areas
- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
- unpaved roadways: all unpaved roadways
- unpaved parking areas: all unpaved parking areas
- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.g** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.h** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.i** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.
- 2.j** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be water application.
- 2.k** 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), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

2. Additional Terms and Conditions (continued)

- 2.1 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

paved roadways and parking areas: all
minimum inspection frequency: once during each day of operation

unpaved roadways and parking areas: all
minimum inspection frequency: once during each day of operation
2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

V. Testing Requirements

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

1.a Emission Limitation:
5.70 tons PE/yr

Applicable Compliance Method:

Compliance with the annual limitation may be determined by summing the total emissions from paved and unpaved roadways, and then dividing by 2000 lbs/ton.

The permittee may demonstrate compliance as follows:

i. for unpaved roadways, multiply the appropriate emission factor from AP-42, Chapter 13.2.2.2 (revised 9/98) by the maximum vehicle miles traveled and a control factor of $(1 - 0.9)^*$; and

ii. for paved roadways, multiply the appropriate emission factor from AP-42, Chapter 13.2.1.2 (10/97) by the maximum vehicle miles traveled and a control factor of $(1 - 0.9)^*$.

*the control efficiency for dust suppression is assumed to be 90%

1.b Emission Limitation:
1.14 tons PM10/yr

Applicable Compliance Method:

Compliance with the annual limitation may be determined by summing the total emissions from paved and unpaved roadways, and then dividing by 2000 lbs/ton.

The annual limitation may be determined as follows:

i. for unpaved roadways, multiply the appropriate emission factor from AP-42, Chapter 13.2.2.2 (revised 9/98) by the maximum vehicle miles traveled and a control factor of $(1 - 0.9)^*$, and

ii. for paved roadways, multiply the appropriate emission factor from AP-42, Chapter 13.2.1.2 (10/97) by the maximum vehicle miles traveled and a control factor of $(1 - 0.9)^*$.

*the control efficiency for dust suppression is assumed to be 90%

1.c Emission Limitation:

There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

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

1.d Emission Limitation:

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

Applicable Compliance Method:

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

Facility Name: **Carmeuse Ohio, Inc.-Maple Grove Lime Plant**
Facility ID: **03-74-00-0010**
Emissions Unit: **Roadways & Parking (F001)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Limestone Handling (F003)
Activity Description: Conveying, screening, and transfer

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
limestone material handling	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	4.34 tons particulate emissions (PE)/yr
		2.10 tons particulate matter less than 10 microns in size (PM10)/yr
		best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
		See A.I.2.f.
	40 CFR, Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A)	See A.I.2.g.
	OAC rule 3745-17-07 (B)(1)	See A.I.2.d.
	40 CFR, Part 60, Subpart OOO	See A.I.2.e.
	no visible emissions from the building enclosures (see A.I.2.c)	
	10% opacity from the transfer points and screening operations (see A.I.2.c)	

2. Additional Terms and Conditions

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

Limestone Material Handling

2. Additional Terms and Conditions (continued)

- 2.b** For each material handling operation that is not adequately enclosed, the control measure(s), identified in A.1.2.c shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2. Additional Terms and Conditions (continued)

2.c Visible PE from the limestone material handling operations shall not exceed the following opacity restrictions:

Emission Point: limestone storage pile to C-108
Equipment Type: transfer point
Control Measures: total enclosure
Opacity Limitation: no visible emissions

Emission Point: C-108 to C-111
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: front end loader to N-109
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: N-109 (hopper) to C-109
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: C-109 to C-111
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: C-111 to S-111 or C-113
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: S-111 to S-112
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: S-111 to C-113
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: S-111 to C-114
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: S-112 to C-112
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: S-112 to C-113
Equipment Type: transfer point
Control Measures: water

Opacity Limitation: 10%

2. Additional Terms and Conditions (continued)

Emission Point: S-112 to C-114
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: C-114 to C-115
Equipment Type: transfer point
Control Measures: water
Opacity Limitation: 10%

Emission Point: Screen 111
Equipment Type: screen
Control Measures: water
Opacity Limitation: 10%

Emission Point: Screen 112
Equipment Type: screen
Control Measures: water
Opacity Limitation: 10%

Emission Point: C-113 to C-116
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

Emission Point: C-116 to C-117
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

Emission Point: C-117 to T-118
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

Emission Point: C-118 to T-218
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

Emission Point: T-118 to C-119
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

Emission Point: T-218 to C-219
Equipment Type: transfer point
Control Measures: building enclosure/water
Opacity Limitation: no visible emissions

2.d 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

2.e This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(1)(e).

2. Additional Terms and Conditions (continued)

- 2.f** The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO, 40 CFR Part 52.12, and OAC rules 3745-31-10 through 20.
- 2.g** The permittee shall employ best available control technology (BACT) to control PE from this emissions unit. BACT has been determined to be a building enclosure and/or water application (see A.I.2.c).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1.** Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s): all material handling operations that are not adequately enclosed

minimum inspection frequency: daily

- 2.** The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3.** The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- 4.** The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 5.** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the enclosed transfer points of this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive emissions from the enclosed transfer points of this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

Applicable Compliance Method:
The permittee may demonstrate compliance as follows:
 - i. for each transfer point, multiply the appropriate emission factor from AP-42 Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr), and then multiply by the appropriate control factor (1 - CE);*
 - ii. for each screening operation, multiply the appropriate emission factor from AP-42 Chapter 11.19.2 (revised 1/95) by the maximum throughput (tons/hr), and then multiply by the control factor (1 - 0.75);*
 - iii. sum all the fugitive PE rates for all the transfer points and screening operations;
 - iv. multiply iii above by 8760, and then divide by 2000.
- * for watering - 75%
* for building enclosure/watering - 98.75%
* for total enclosure - 100%

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
2.10 tons PM10/yr

Applicable Compliance Method:

The permittee may demonstrate compliance as follows:

- i. for each transfer point, multiply the appropriate emission factor from AP-42 Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr), and then multiply by the appropriate control factor (1 - CE);*
- ii. for each screening operation, multiply the appropriate emission factor from AP-42 Chapter 11.19.2 (revised 1/95) by the maximum throughput (tons/hr), and then multiply by the control factor (1 - 0.75);*
- iii. sum all the fugitive PM10 emission rates for all the transfer points and screening operations;
- iv. multiply iii above by 8760, and then divide by 2000.

* for watering - 75%

* for building enclosure/watering - 98.75%

* for total enclosure - 100%

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

Applicable Compliance Method:

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

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

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Product Handling # 1 (P001)
Activity Description: Conveying and transfer

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
product handling #1/lime material handling	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	1.05 lbs particulate emissions (PE)/hr 4.60 tons PE/yr (see A.I.2.a) 0.01 gr PE/dscf
		no visible emissions from building enclosures (see A.I.2.b)
		7% opacity from stack emissions (see A.I.2.b)
		See A.I.2.c.
		See A.I.2.d.
	40 CFR Part 52.21 OAC rule 3745-31-10 through 20	
	OAC rule 3745-17-11 (B)	See A.I.2.e.
	OAC rule 3745-17-07 (A)	See A.I.2.f.
	OAC rule 3745-17-08(B)	None (see A.I.2.g)
	OAC rule 3745-17-07(B)(1)	None (see A.I.2.h)

2. Additional Terms and Conditions

- All particulate emissions are assumed to be particulate matter less than 10 microns in size (PM10).

2. Additional Terms and Conditions (continued)

2.b Visible PE and BAT requirements for the material handling operation shall comply with the following:

Emission Point: C-135.1 to E-136
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-136 to C-136.1
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-136 to C-136.2
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-136.1 to T-136 (6E, 7W, 8W, 9E, 10W)
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-136.1 to T-136 (1E, 2W, 3W, 4E, 5W)
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-117 to C-118
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.

2.d The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf.

2.e The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).

2.f The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

2.g 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), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

2. Additional Terms and Conditions (continued)

- 2.h** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the building enclosure serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

IV. Reporting Requirements (continued)

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

V. Testing Requirements

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

- 1.a Emission Limitations:

1.05 lbs PE/hr
4.60 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (12304 dscfm) and by 60, and then dividing by 7000.

If required, compliance with the hourly PE limitation shall be determined in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.b Emission Limitation:

0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Methods 1 - 5.

- 1.c Emission Limitation:

no visible emissions from building enclosures

Applicable Compliance Method:

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

- 1.d Emission Limitation:

7% opacity from stack emissions

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Product Handling # 2 (P002)
Activity Description: Conveying, transfer, screening, and briquetter

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
product handling #2/lime material handling	OAC rule 3745-31-05 (A)(3) PTI #03-13527, issued 5/23/02	1.38 lbs particulate emissions (PE)/hr 6.04 tons PE/yr (see A.I.2.a) 0.01 gr PE/dscf no visible emissions from building enclosures (see A.I.2.b) 7% opacity from stack emissions (see A.I.2.b)
	40 CFR Part 52.21	See A.I.2.c.
	OAC rule 3745-31-10 through 20	See A.I.2.d.
	OAC rule 3745-17-11 (B)	See A.I.2.e.
	OAC rule 374517-07 (A)	See A.I.2.f.
	OAC rule 3745-17-08 (B)	None (see A.I.2.g)
	OAC rule 3745-17-07 (B)(1)	None (see A.I.2.h)

2. Additional Terms and Conditions

- All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2. Additional Terms and Conditions (continued)

2.b Visible PE and BAT requirements for the material handling operation shall comply with the following:

Emission Point: C-141 to S-141
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-141 to C-143
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-141 to T-141
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-141 to C-142
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-141 to T-151
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-143 to T-144 or T-143
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-142 to T-143 or T-142
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: E-152 to T-151
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-151 to S-151
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-151 to C-142 or T-151
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: R-151 and R-152 to C-154
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-151 to C-165
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-141 to C-165
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-141
Equipment Type: screen
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-151
Equipment Type: screen
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.

2.d The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf.

2. Additional Terms and Conditions (continued)

- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.f** The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).
- 2.g** 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), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.h** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

- 1.** The pressure drop across the baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

- 1.a Emission Limitations:
1.38 lbs PE/hr
6.04 tons PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (16089 dscfm) and by 60, and then dividing by 7000.

If required, compliance with the hourly PE limitation shall be determined in accordance with 40 CFR Part 60, Appendix A - Methods 1 - 5.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.b Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A - Methods 1 - 5.

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: # 12 Kiln (P003)
Activity Description: Rotary Kiln # 12 and cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary kiln #12 with baghouse	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/03)	14.23 lbs particulate emissions (PE)/hr 62.33 tons PE/yr (see A.I.2.a) 0.021 gr PE/dscf 541.68 lbs nitrogen oxides (NOx)/hr 2372.56 tons NOx/yr 330.70 lbs sulfur dioxide (SO2)/hr 1448.46 tons 270.83 lbs carbon monoxide (CO)/hr 1186.23 tons CO/yr 16.25 lbs volatile organic compounds (VOC)/hr 71.17 tons VOC/yr 0.005 lb lead (Pb)/hr 0.02 ton lead (Pb)/yr 15% opacity, as a six-minute average See A.I.2.b. See A.I.2.c. See A.I.2.d. See A.I.2.e. See A.I.2.f.
	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-18-80 (B) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)	

2. Additional Terms and Conditions

- 2.a** All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2. Additional Terms and Conditions (continued)

- 2.b** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rules 3745-31-10 through 20, and OAC rule 3745-18-80 (B).
- 2.c** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.021 gr PE/dscf. Based on the BACT analysis, it has been determined that no control technologies for NO_x, SO₂, CO, and VOC are cost-effective.
- 2.d** The permittee shall not cause or permit the emission of SO₂ to exceed a maximum of 34.0 lbs SO₂ per ton of actual process weight input.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.f** The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

- 1.** The permittee shall only burn coal, coke, and/or natural gas in this emissions unit. The maximum sulfur content of the coal shall not exceed 5.50 percent, by weight. The maximum sulfur content of the coke shall not exceed 6.50 percent, by weight.
- 2.** The quality of coke and/or coal burned in this emissions unit shall meet, on an as-received basis, sulfur contents (in terms of lbs/mmBtu) that are no greater than the sulfur contents determined during the most recent emission testing that demonstrated the emissions unit was in compliance with the limitations in section A.I.1 of this permit.

III. Monitoring and/or Record Keeping Requirements

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content (percent) in accordance with the most recent version of the following ASTM methods: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

- 2.** The permittee shall maintain monthly records of the total quantity of coal and petroleum coke received, the results of the analyses for sulfur content (in percent, by weight) and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu.

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

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

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, coke, and/or coal was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, which identify all exceedances of the maximum sulfur content of the coal of 5.50 percent, by weight, and/or the maximum sulfur content of the coke of 6.50 percent, by weight.
3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in section A.I.1., detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. The permittee shall notify the Ohio EPA, Northwest District Office in writing of any record which shows a deviation of the allowable SO₂ emission limitation, as shown by the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office within 45 days after the deviation occurs.

V. Testing Requirements

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

- 1.a** Emission Limitations:
14.23 lbs PE/hr
62.33 tons PE/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

The permittee may also demonstrate compliance with the hourly PE limitation by multiplying the manufacturer's guaranteed outlet grain loading of 0.021 gr/dscf by the maximum volumetric air flow (79,044 dscfm) and by 60, and then dividing by 7000.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.b** Emission Limitation:
0.021 gr PE/dscf

Applicable Compliance Method:

Compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

- 1.c** Emission Limitations:
541.68 lbs NOx/hr
2372.56 tons NOx/yr

Applicable Compliance Method:

Compliance with the hourly NOx emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly NOx emission limitation by multiplying the company-supplied emission factor of 20.003 lbs NOx/ton lime by the maximum lime throughput (tons/hr).

The annual NOx emission limitation was calculated by multiplying the hourly NOx emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.d** Emission Limitations:
330.70 lbs SO₂/hr
1448.46 tons SO₂/yr

Applicable Compliance Method:

Compliance with the hourly SO₂ emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly SO₂ emission limitation by multiplying the company-supplied emission factor of 12.212 lbs SO₂/ton lime by the maximum lime throughput (tons/hr), and then multiplying by a control factor of (1 - 0.7).*

The annual SO₂ emission limitation was calculated by multiplying the hourly SO₂ emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

* a 70% reduction of SO₂ emissions was assumed due to the natural dry scrubbing of the kiln. This assumption was established assuming a coke usage of 100% and a 6.50% maximum sulfur content.

- 1.e** Emission Limitations:
270.83 lbs CO/hr
1186.23 tons CO/yr

Applicable Compliance Method:

Compliance with the hourly CO emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly CO emission limitation by multiplying the company-supplied emission factor of 10.001 lbs CO/ton lime by the maximum lime throughput (tons/hr).

The annual CO emission limitation was calculated by multiplying the hourly CO emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.f** Emission Limitations:
16.25 lbs VOC/hr
71.17 tons VOC/yr

Applicable Compliance Method:

Compliance with the hourly VOC emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 25 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly VOC emission limitation by multiplying the company-supplied emission factor of 0.6 lb VOC/ton lime by the maximum lime throughput (tons/hr).

The annual VOC emission limitation was calculated by multiplying the hourly VOC emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.g** Emission Limitations:
0.005 lb lead/hr
0.02 ton lead/yr

Applicable Compliance Method:

Compliance with the hourly Pb emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 12 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly Pb emission limitation by multiplying the company-supplied emission factor of 0.00042 lb Pb/ton lime by the maximum lime throughput (tons/hr).

The annual Pb emission limitation was calculated by multiplying the hourly Pb emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

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

Applicable Compliance Method:

The permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A and the record keeping requirements established in section A.III of this permit.

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

Applicable Compliance Method:

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

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NO_x, SO₂, CO, VOC, and lead.
- 2.c** The following test methods from 40 CFR, Part 60, Appendix A, in addition to Methods 1 - 4, shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. PE - Method 5
 - ii. NO_x - Method 7E
 - iii. SO₂ - Method 6C
 - iv. CO - Method 10
 - v. VOC - Method 25A
 - vi. lead - Method 12A
 - vii. PM₁₀ - Method 201 or 201 A or Method 5 (including the back half of the sampling train and particle size distribution)

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

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

V. Testing Requirements (continued)

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

1. The permittee submitted a deficient permit to install application for Permit to Install (PTI) #03-13527. The emission factors which were used to determine NO_x and CO emissions were incorrect. As a result, the permittee cannot demonstrate compliance with their current NO_x and CO emission limitations. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI modification application within 2 months after issuance of this permit.

[The permittee is in the process of performing a BACT analysis, updating their air toxics modeling, and submitting a modification to their initial PTI application. The company has agreed to submit the information outlined above by the end of March 2003.]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: # 13 Kiln (P004)
Activity Description: Rotary Kiln # 13 and cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
rotary kiln #13 with baghouse	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/03)	14.23 lbs particulate emissions (PE)/hr 62.33 tons PE/yr (see A.I.2.a) 0.021 gr PE/dscf 541.68 lbs nitrogen oxides (NOx)/hr 2372.56 tons NOx/yr 330.70 lbs sulfur dioxide (SO2)/hr 1448.46 tons 270.83 lbs carbon monoxide (CO)/hr 1186.23 tons CO/yr 16.25 lbs volatile organic compounds (VOC)/hr 71.17 tons VOC/yr 0.005 lb lead (Pb)/hr 0.02 ton lead (Pb)/yr 15% opacity, as a six-minute average See A.I.2.b. See A.I.2.c. 40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-18-80 (B) OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)

2. Additional Terms and Conditions

- All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2. Additional Terms and Conditions (continued)

- 2.b** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rules 3745-31-10 through 20, and OAC rule 3745-18-80 (B).
- 2.c** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be the use of a baghouse with a maximum outlet grain loading of 0.021 gr PE/dscf. Based on the BACT analysis, it has been determined that no control technologies for NO_x, SO₂, CO, and VOC are cost-effective.
- 2.d** The permittee shall not cause or permit the emission of SO₂ to exceed a maximum of 34.0 lbs SO₂ per ton of actual process weight input.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.f** The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

- 1.** The permittee shall only burn coal, coke, and/or natural gas in this emissions unit. The maximum sulfur content of the coal shall not exceed 5.50 percent, by weight. The maximum sulfur content of the coke shall not exceed 6.50 percent, by weight.
- 2.** The quality of coke and/or coal burned in this emissions unit shall meet, on an as-received basis, sulfur contents (in terms of lbs/mmBtu) that are no greater than the sulfur contents determined during the most recent emission testing that demonstrated the emissions unit was in compliance with the limitations in section A.I.1 of this permit.

III. Monitoring and/or Record Keeping Requirements

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content (percent) in accordance with the most recent version of the following ASTM methods: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

- 2.** The permittee shall maintain monthly records of the total quantity of coal and petroleum coke received, the results of the analyses for sulfur content (in percent, by weight) and heat content, and the calculated sulfur dioxide emission rate, in lbs/mmBtu.

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

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

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, coke, and/or coal was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, which identify all exceedances of the maximum sulfur content of the coal of 5.50 percent, by weight, and/or the maximum sulfur content of the coke of 6.50 percent, by weight.
3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in section A.I.1., detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. The permittee shall notify the Ohio EPA, Northwest District Office in writing of any record which shows a deviation of the allowable SO₂ emission limitation, as shown by the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northwest District Office within 45 days after the deviation occurs.

V. Testing Requirements

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

- 1.a** Emission Limitations:
14.23 lbs PE/hr
62.33 tons PE/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

The permittee may also demonstrate compliance with the hourly PE limitation by multiplying the manufacturer's guaranteed outlet grain loading of 0.021 gr/dscf by the maximum volumetric air flow (79,044 dscfm) and by 60, and then dividing by 7000.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.b** Emission Limitation:
0.021 gr PE/dscf

Applicable Compliance Method:

Compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

- 1.c** Emission Limitations:
541.68 lbs NO_x/hr
2372.56 tons NO_x/yr

Applicable Compliance Method:

Compliance with the hourly NO_x emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly NO_x emission limitation by multiplying the company-supplied emission factor of 20.003 lbs NO_x/ton lime by the maximum lime throughput (tons/hr).

The annual NO_x emission limitation was calculated by multiplying the hourly NO_x emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.d** Emission Limitations:
330.70 lbs SO₂/hr
1448.46 tons SO₂/yr

Applicable Compliance Method:

Compliance with the hourly SO₂ emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly SO₂ emission limitation by multiplying the company-supplied emission factor of 12.212 lbs SO₂/ton lime by the maximum lime throughput (tons/hr), and then multiplying by a control factor of (1 - 0.7).*

The annual SO₂ emission limitation was calculated by multiplying the hourly SO₂ emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

* a 70% reduction of SO₂ emissions was assumed due to the natural dry scrubbing of the kiln. This assumption was established assuming a coke usage of 100% and a 6.50% maximum sulfur content.

- 1.e** Emission Limitations:
270.83 lbs CO/hr
1186.23 tons CO/yr

Applicable Compliance Method:

Compliance with the hourly CO emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly CO emission limitation by multiplying the company-supplied emission factor of 10.001 lbs CO/ton lime by the maximum lime throughput (tons/hr).

The annual CO emission limitation was calculated by multiplying the hourly CO emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

- 1.f** Emission Limitations:
16.25 lbs VOC/hr
71.17 tons VOC/yr

Applicable Compliance Method:

Compliance with the hourly VOC emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 25 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly VOC emission limitation by multiplying the company-supplied emission factor of 0.6 lb VOC/ton lime by the maximum lime throughput (tons/hr).

The annual VOC emission limitation was calculated by multiplying the hourly VOC emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.g** Emission Limitations:
0.005 lb lead/hr
0.02 ton lead/yr

Applicable Compliance Method:

Compliance with the hourly Pb emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 - 4 and 12 of 40 CFR, Part 60, Appendix A.

The permittee may also demonstrate compliance with the hourly Pb emission limitation by multiplying the company-supplied emission factor of 0.00042 lb Pb/ton lime by the maximum lime throughput (tons/hr).

The annual Pb emission limitation was calculated by multiplying the hourly Pb emission limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

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

Applicable Compliance Method:

The permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A and the record keeping requirements established in section A.III of this permit.

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

Applicable Compliance Method:

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

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted no later than 90 days following the final issuance of this permit.
- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NO_x, SO₂, CO, VOC, and lead.
- 2.c** The following test methods from 40 CFR, Part 60, Appendix A, in addition to Methods 1 - 4, shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. PE - Method 5
 - ii. NO_x - Method 7E
 - iii. SO₂ - Method 6C
 - iv. CO - Method 10
 - v. VOC - Method 25A
 - vi. lead - Method 12A
 - vii. PM₁₀ - Method 201 or 201 A or Method 5 (including the back half of the sampling train and particle size distribution)

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

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

V. Testing Requirements (continued)

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

1. The permittee submitted a deficient permit to install application for Permit to Install (PTI) #03-13527. The emission factors which were used to determine NO_x and CO emissions were incorrect. As a result, the permittee cannot demonstrate compliance with their current NO_x and CO emission limitations. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI modification application within 2 months after issuance of this permit.

[The permittee is in the process of performing a BACT analysis, updating their air toxics modeling, and submitting a modification to their initial PTI application. The company has agreed to submit the information outlined above by the end of March 2003.]

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Solid Fuel Handling (P901)
Activity Description: Unloading, conveying, transfer, and storage of solid fuels

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
solid fuel (coal and coke) handling	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	fugitive emissions: 0.62 ton particulate emissions (PE)/yr 0.31 ton particulate matter less than 10 microns in size (PM10)/yr no visible emissions from building enclosures (see A.I.2.c) best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.c) stack emissions: 0.89 lb PE/hr 3.90 tons PE/yr (see A.I.2.b) 0.01 gr PE/dscf 7% opacity from stack emissions (see A.I.2.c) See A.I.2.d. See A.I.2.e.
	40 CFR Part 52.21	See A.I.2.f.
	OAC rule 3745-31-10 through 20	See A.I.2.g.
	OAC rule 3745-17-08 (A)	See A.I.2.h.
	OAC rule 3745-17-07 (B)(1)	See A.I.2.i.
	OAC rule 3745-17-11 (B)	
	OAC rule 3745-17-07 (A)	

2. Additional Terms and Conditions

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

Solid Fuel Handling (coal and coke)

2.b All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2.c Visible particulate emissions from solid fuel handling operations included under this permit shall not exceed the following opacity restrictions:

Emission Point: truck unloading to hopper
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.1 and T-191.2
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.3 and T-191.4
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.5 and T-191.6
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.7 and T-191.8
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.9 and T-191.10
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to T-191.11 and T-191.12
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: E-191 to C-191
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: C-191 to C-191.1
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: C-191.1 to C-192
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: C-192 to solid fuel storage bunkers (6)
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: F-193.1, F-193.2 & F-193.3 to C-193
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: F-193.1, F-193.2 & F-193.3 to C-293
Equipment Type: transfer point (1)
Control Measures: building enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: hopper to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-191.1 and T-191.2 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-191.3 and T-191.4 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: T-191.5 and T-191.6 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-191.7 and T-191.8 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-191.9 and T-191.10 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-191.11 and T-191.12 to E-191
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-193 to R-196
Equipment Type: transfer point (2)
Control Measures: total enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: C-293 to R-296
Equipment Type: transfer point (2)
Control Measures: total enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: R-196
Equipment Type: crusher
Control Measures: total enclosure
Opacity Limitation: no visible emissions from the building

Emission Point: R-296
Equipment Type: crusher
Control Measures: total enclosure
Opacity Limitation: no visible emissions from the building

- 2.d** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.
- 2.e** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf, as specified in Section A.I.2.c.
- 2.f** 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

2. Additional Terms and Conditions (continued)

- 2.g** 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.h** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.i** The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

- 1.** The pressure drop across the baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

- 1.** The permittee shall submit pressure drop deviation (excursion) reports, in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit, that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

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

V. Testing Requirements

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

- 1.b Emission Limitation:
0.31 ton fugitive PM10/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PM10 emission limitation by summing the hourly fugitive PE rates, from the transfer and crushing operations associated with this emissions unit (see A.I.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PM10 emission rates may be determined as follows:

- i. for transfer points 1, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 0.5)$;^{*}
- ii. for transfer points 2, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 1)$; ^{**} and
- iii. for crushing operations, multiply the appropriate emission factor from AP-42, Chapter 11.19.2 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 1)$.^{**}

^{*} the building enclosure is assumed to have a capture efficiency of 50%

^{**} the total enclosure is assumed to have a capture efficiency of 100%

V. Testing Requirements (continued)

1.a Emission Limitation:
0.62 ton fugitive PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PE limitation by summing the hourly fugitive PE rates, from the transfer and crushing operations associated with this emissions unit (see A.1.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PE rates may be determined as follows:

- i. for transfer points 1, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 0.5)^*$;
- ii. for transfer points 2, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 1)^{**}$; and
- iii. for crushing operations, multiply the appropriate emission factor from AP-42, Chapter 11.19.2 (revised 1/95) by the maximum throughput (tons/hr) and by a control factor of $(1 - 1)^{**}$.

* the building enclosure is assumed to have a capture efficiency of 50%

** the total enclosure is assumed to have a capture efficiency of 100%

1.c Emission Limitations:
0.89 lb PE/hr, from the stack
3.90 tons PE/yr, from the stack

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (10,411 dscfm) and by 60, and then dividing by 7000.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

1.d Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Common Product Handling (P902)
Activity Description: Conveying, transfer, and screening

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
common product handling	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	fugitive emissions: 0.63 ton particulate emissions (PE)/yr 0.30 ton particulate matter less than 10 microns in size (PM10)/yr no visible emissions from building enclosures (see A.I.2.d) best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust stack emissions: 1.77 lbs PE/hr 7.75 tons PE/yr (see A.I.2.c) 0.01 gr PE/dscf 7% opacity from stack emissions (see A.I.2.d) 10% opacity from transfer points and screening operations (see A.I.2.d)
	40 CFR Part 52.21	See A.I.2.e.
	OAC rule 3745-31-10 through 20	See A.I.2.f.
	OAC rule 3745-17-08 (A)	See A.I.2.g.
	OAC rule 3745-17-07 (B)(1)	See A.I.2.h.
	OAC rule 3745-17-11 (B)	See A.I.2.i.

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

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-17-07 (A)

See A.I.2.j.

2. Additional Terms and Conditions

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

common product handling

2.b All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2.c The total stack PE limitation (1.77 lbs PE/hr) is comprised of two emission points, Baghouse D-131 and Baghouse D-135. The emission limitation of 1.77 lbs PE/hr was established in accordance with the following:

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

where,

- D-131 = PE emissions from Baghouse D-131
- D-131 = (0.01 gr/dscf) (16089 dscfm) (60 min/hr) (lb/7000 gr)
- D-131 = 1.38 lbs PE/hr

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

2. Additional Terms and Conditions (continued)

2.d Visible particulate emissions from the common product handling operations included under this permit shall not exceed the following opacity restrictions:

Emission Point: #1 kiln cooler to C-131
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-131 to E-131
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-131 to C-132
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-131 to S-131
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-131 to C-134
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: #2 kiln cooler to C-231
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-231 to E-231
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: C-231 to C-132
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-231 to S-231
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-231 to C-234
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-131 to T-131.5
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-131 to C-133
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-131 to T-131.5
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-231 to T-231.5
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-231 to C-133
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: S-231 to T-231.5
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-133 to C-141
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-134 to T-131.1, T-131.2, T-131.3 & T-131.4
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-234 to T-232.1, T-232.2, T-232.3 & T-232.4
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: E-135 to C-141
Equipment Type: transfer point
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: S-131
Equipment Type: screen
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: S-231
Equipment Type: screen
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: product storage bins to C-135
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

2. Additional Terms and Conditions (continued)

Emission Point: C-135 to C-135.1
Equipment Type: transfer point
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: C-135 to E-135
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

- 2.e The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.
- 2.f The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf, as specified in Section A.I.2.c.
- 2.g 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.h This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.j The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

- 1. The pressure drop across each baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the building enclosing the transfer points and crushing operations associated with this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:
0.63 ton fugitive PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual PE limitation by multiplying the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^*$, and by 8760 and then dividing by 2000.

* the capture efficiency for the enclosure is assumed to be 95%.

1.b Emission Limitation:
0.30 ton fugitive PM₁₀/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual PM₁₀ emission limitation by multiplying the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^*$, and by 8760 and then dividing by 2000.

* the capture efficiency for the enclosure is assumed to be 95%.

1.c Emission Limitations:
1.77 lbs PE/hr, from the stack
7.75 tons PE/yr, from the stack

Applicable Compliance Method:

The hourly allowable PE limitation was established in accordance with the following:

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

where,

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

$$\begin{aligned} D-135 &= \text{PE emissions from Baghouse D-135} \\ D-135 &= (0.01 \text{ gr/dscf}) (4543 \text{ dscfm}) (60 \text{ min/hr}) (\text{lb}/7000 \text{ gr}) \\ D-135 &= 0.39 \text{ lb PE/hr} \end{aligned}$$

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

1.d Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

V. Testing Requirements (continued)

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

Applicable Compliance Method:

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

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

Applicable Compliance Method:

If required, compliance with the visible emission limitations specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

- 1.g** Emission Limitation:
10% opacity from transfer points and screening operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Product Storage/Loadout # 1 (P903)

Activity Description: Product Storage and loadout # 1

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
product storage/loadout #1	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	fugitive emissions: 0.63 ton particulate emissions (PE)/yr 0.30 ton particulate matter less than 10 microns in size (PM10)/yr no visible emissions from building enclosures (see A.I.2.d) best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust stack emissions: 0.62 lb PE/hr 2.72 tons PE/yr (see A.I.2.c) 0.01 gr PE/dscf 7% opacity from stack emissions (see A.I.2.d) 10% opacity from loading operations (see A.I.2.d) See A.I.2.e. See A.I.2.f. See A.I.2.g. See A.I.2.h. See A.I.2.i.
	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B)	

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

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-17-07 (A)

See A.1.2.j.

2. Additional Terms and Conditions

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

Product Storage/Loadout #1

2.b All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2.c The total stack PE limitation (0.62 lb PE/hr) is comprised of two emission points, Baghouse D-138 and Baghouse D-139. The emission limitation of 0.62 lb PE/hr was established in accordance with the following:

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

where,

D-138 = PE emissions from Baghouse D-138
D-138 = (0.01 gr/dscf) (6057 dscfm) (60 min/hr) (lb/7000 gr)
D-138 = 0.52 lb PE/hr

D-139 = PE emissions from Baghouse D-139
D-139 = (0.01 gr/dscf) (1136 dscfm) (60 min/hr) (lb/7000 gr)
D-139 = 0.10 lb PE/hr

2. Additional Terms and Conditions (continued)

- 2.d** Visible particulate emissions from the product storage/loadout #1 operations included under this permit shall not exceed the following opacity restrictions:

Emission Point: T-136 (1E, 3W, 5W) to C-137.1
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-136(2W, 4E) to C-137.2
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: T-136 (6E, 7W, 8W, 9E, 10W), C-137.1, and C-137.2 to C-138
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-138 to C-139
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: C-139 to loadout hopper
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from the building

Emission Point: loadout hopper to railcar
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

- 2.e** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.
- 2.f** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf, as specified in Section A.I.2.c.
- 2.g** 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.h** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).

2. Additional Terms and Conditions (continued)

- 2.j The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

IV. Reporting Requirements (continued)

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

V. Testing Requirements

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

- 1.a Emission Limitation:
0.63 ton fugitive PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual PE limitation by multiplying the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^*$, and by 8760 and then dividing by 2000.

* the capture efficiency for the enclosure is assumed to be 95%.

- 1.b Emission Limitation:
0.30 ton fugitive PM₁₀/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual PM₁₀ emission limitation by multiplying the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^*$, and by 8760 and then dividing by 2000.

* the capture efficiency for the enclosure is assumed to be 95%.

- 1.c Emission Limitations:
0.62 lb PE/hr, from the stack
2.72 tons PE/yr, from the stack

Applicable Compliance Method:

The hourly allowable PE limitation was established in accordance with the following:

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

where,

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

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

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

V. Testing Requirements (continued)

- 1.d** Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

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

Applicable Compliance Method:

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

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

Applicable Compliance Method:

If required, compliance with the visible emission limitations specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

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

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Product Storage/Loadout # 2 (P904)
Activity Description: Product Storage and loadout # 2

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
product storage/loadout #2	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	fugitive emissions: 2.40 tons particulate emissions (PE)/yr 1.13 tons particulate matter less than 10 microns in size (PM10)/yr no visible emissions from building enclosures (see A.I.2.c) best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust stack emissions: 1.30 lbs PE/hr 5.69 tons PE/yr (see A.I.2.b) 0.01 gr PE/dscf 7% opacity from stack emissions (see A.I.2.c) 10% opacity from transfer points and loading operations (see A.I.2.c) See A.I.2.d. See A.I.2.e. See A.I.2.f. See A.I.2.g. See A.I.2.h.
	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B)	

Facility Name: **Carmeuse Ohio, Inc.-Maple Grove Lime Plant**
Facility ID: **03-74-00-0010**
Emissions Unit: **Product Storage/Loadout # 2 (P904)**

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

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-17-07 (A)

See A.I.2.i.

2. Additional Terms and Conditions

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

Product Storage/Loadout #2

2.b All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2. Additional Terms and Conditions (continued)

2.c Visible particulate emissions from the product storage/loadout #2 operations included under this permit shall not exceed the following opacity restrictions:

Emission Point: T-142 to truck/rail
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: T-143 to truck/rail
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: T-144 to truck/rail
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: C-164 to truck/rail
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: T-142, T-143, or T-144 to C-162
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: C-162 to S-162
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: S-162 to C-164
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

2. Additional Terms and Conditions (continued)

Emission Point: S-162 to C-163 (SC)
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: C-163 to E-152
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: C-154 to E-151
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: S-162
Equipment Type: screen
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: R-151
Equipment Type: pelletizing
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: R-152
Equipment Type: pelletizing
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: T-141 to truck
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: T-151 to truck
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

2. Additional Terms and Conditions (continued)

Emission Point: C-165 to truck
Equipment Type: loading
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: truck/rail to C-151
Equipment Type: transfer point
Control Measures: partial enclosure
Opacity Limitation: 10% - fugitive

Emission Point: C-151 to E-151
Equipment Type: transfer point
Control Measures: partial enclosure
Opacity Limitation: 10% - fugitive

2.d The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.

2.f 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

2.g 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).

The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf, as specified in Section A.I.2.c.

2.h The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).

2.i The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

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

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

IV. Reporting Requirements

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

V. Testing Requirements

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

V. Testing Requirements (continued)

- 1.a** Emission Limitation:
2.40 tons fugitive PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PE limitation by summing the hourly fugitive PE rates, from the transfer and loading operations associated with this emissions unit (see A.I.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PE rates may be determined as follows:

- i. for transfer points, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.5)^*$; and
- ii. for loading operations, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^{**}$.

* the building enclosure is assumed to have a capture efficiency of 50%

** the partial enclosure is assumed to have a capture efficiency of 95%

- 1.b** Emission Limitation:
1.13 ton fugitive PM10/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PM10 emission limitation by summing the hourly fugitive PM10 emission rates, from the transfer and loading operations associated with this emissions unit (see A.I.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PM10 emission rates may be determined as follows:

- i. for transfer points, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.5)^*$; and
- ii. for loading operations, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture factor of $(1 - 0.95)^{**}$.

* the building enclosure is assumed to have a capture efficiency of 50%

** the partial enclosure is assumed to have a capture efficiency of 95%

- 1.c** Emission Limitations:
1.30 lbs PE/hr, from the stack
5.69 tons PE/yr, from the stack

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (15,143 dscfm) and by 60, and then dividing by 7000.

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

V. Testing Requirements (continued)

- 1.d** Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

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

Applicable Compliance Method:

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

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

Applicable Compliance Method:

If required, compliance with the visible emission limitations specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

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

Applicable Compliance Method:

If required, compliance with the visible emission limitations specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Kiln Dust Handling (P905)
Activity Description: Pneumatic conveying and loadout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
kiln dust handling	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	fugitive emissions: 0.50 ton particulate emissions (PE)/yr 0.21 ton particulate matter less than 10 microns in size (PM10)/yr no visible emissions from building enclosures (see A.I.2.d) best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust stack emissions: 0.24 lbs PE/hr 1.05 tons PE/yr (see A.I.2.c) 0.01 gr PE/dscf 7% opacity from stack emissions (see A.I.2.d) 10% opacity from transfer points and loading operations (see A.I.2.d) See A.I.2.e. See A.I.2.f. See A.I.2.g. See A.I.2.h. See A.I.2.i.
	40 CFR Part 52.21 OAC rule 3745-31-10 through 20 OAC rule 3745-17-08 (A) OAC rule 3745-17-07 (B)(1) OAC rule 3745-17-11 (B)	

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

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

OAC rule 3745-17-07 (A)

See A.I.2.j.

2. Additional Terms and Conditions

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

Kiln Dust Handling

2.b All PE are assumed to be particulate matter less than 10 microns in size (PM10).

2.c The total PE limitation (0.24 lb PE/hr) is comprised of two emission points, Baghouse D-188 and Baghouse D-189. The emission limitation was established in accordance with the following:

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

where,

D-188 = PE emissions from Baghouse D-188
D-188 = (0.01 gr/dscf) (1577 dscfm) (60 min/hr) (lb/7000 gr)
D-188 = 0.14 lb PE/hr

D-189 = PE emissions from Baghouse D-189
D-189 = (0.01 gr/dscf) (1136 dscfm) (60 min/hr) (lb/7000 gr)
D-189 = 0.10 lb PE/hr

2. Additional Terms and Conditions (continued)

2.d Visible particulate emissions from the product storage/loadout #2 operations included under this permit shall not exceed the following opacity restrictions:

Emission Point: D-185 to T-188
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: D-285 to T-188
Equipment Type: transfer point
Control Measures: building enclosure and baghouse
Opacity Limitation: 7% - stack
no visible emissions from building

Emission Point: C-188 to truck
Equipment Type: loading (1)
Control Measures: partial enclosure and baghouse
Opacity Limitation: 7% - stack
10% - fugitive

Emission Point: T-188 to C-188
Equipment Type: transfer point
Control Measures: partial enclosure and watering
Opacity Limitation: 10% - fugitive

Emission Point: C-188 to R-188
Equipment Type: transfer point
Control Measures: partial enclosure and watering
Opacity Limitation: 10% - fugitive

Emission Point: R-188 to truck
Equipment Type: loading (2)
Control Measures: partial enclosure and watering
Opacity Limitation: 10% - fugitive

Emission Point: C-121.1 and C-121.2 to dust bin (kiln #12)
Equipment Type: transfer point
Control Measures: water - sludge
Opacity Limitation: no visible emissions from building

Emission Point: C-221.1 and C-221.2 to dust bin (kiln #13)
Equipment Type: transfer point
Control Measures: water - sludge
Opacity Limitation: no visible emissions from building

2. Additional Terms and Conditions (continued)

Emission Point: dust collector #1 to C-185
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

Emission Point: dust collector #1 to C-186
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

Emission Point: C-185 & C-186 to C-187
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

Emission Point: dust collector #2 to C-285
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

Emission Point: dust collector #2 to C-286
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

Emission Point: C-285 & C-286 to C-287
Equipment Type: transfer point
Control Measures: sealed conveyor, negative pressure
Opacity Limitation: no visible emissions from building

- 2.e** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20.
- 2.f** The permittee shall employ best available control technology (BACT) to control PE from this emission unit. BACT has been determined to be a total enclosure or building enclosure and/or the use of a baghouse with a maximum outlet grain loading of 0.01 gr PE/dscf, as specified in Section A.I.2.c.
- 2.g** 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.h** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.i** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.j** The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 5 to 8 inches of water while the emissions unit is in operation.

[The established pressure drop range applies at all times, except during periods of low flow and following rebagging until sufficient filter cake is developed on the bags.]

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

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

- 1.a Emission Limitation:
0.50 ton fugitive PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PE limitation by summing the hourly fugitive PE rates, from the transfer points, loading 1 (partial enclosure/baghouse) and loading 2 (partial enclosure/watering) operations associated with this emissions unit (see A.I.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PE rates may be determined as follows:

- i. for transfer points , multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - X^*)$;
- ii. for loading 1, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - 0.5)$; and
- iii. for loading 2, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - 0.875)$.

- * for transfer points with partial enclosure/watering - 75%
- * for transfer points with watering (sludge-like material) - 98.75%
- * for transfer points with total enclosure (sealed conveyor, negative pressure)- 100%

- 1.b Emission Limitation:
0.21 ton fugitive PM10/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the annual fugitive PM10 emission limitation by summing the hourly fugitive PE rates, from the transfer points, loading 1 (partial enclosure/baghouse) and loading 2 (partial enclosure/watering) operations associated with this emissions unit (see A.I.2.c), and multiplying by 8760, and then dividing by 2000.

The hourly fugitive PM10 emission rates may be determined as follows:

- i. for transfer points , multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - X^*)$;
- ii. for loading 1, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - 0.5)$; and
- iii. for loading 2, multiply the appropriate emission factor from AP-42, Chapter 13.2.4 (revised 1/95) by the maximum throughput (tons/hr) and by a capture/control factor of $(1 - 0.875)$.

- * for transfer points with partial enclosure/watering - 75%
- * for transfer points with watering (sludge-like material) - 98.75%
- * for transfer points with total enclosure (sealed conveyor, negative pressure)- 100%

V. Testing Requirements (continued)

- 1.c** Emission Limitations:
0.24 lb PE/hr, from the stack
1.05 tons PE/yr, from the stack

Applicable Compliance Method:

The hourly allowable PE limitation was established in accordance with the following:

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

where,

D-188 = PE emissions from Baghouse D-188
D-188 = (0.01 gr/dscf) (1577 dscfm) (60 min/hr) (lb/7000 gr)
D-188 = 0.14 lb PE/hr

D-189 = PE emissions from Baghouse D-189
D-189 = (0.01 gr/dscf) (1136 dscfm) (60 min/hr) (lb/7000 gr)
D-189 = 0.10 lb PE/hr

The annual PE limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

- 1.d** Emission Limitation:
0.01 gr PE/dscf

Applicable Compliance Method:

If required, compliance with the PE limitation shall be determined based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A - Methods 1 - 5.

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

Applicable Compliance Method:

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

- 1.f** Emission Limitation:
7% opacity from stack emissions
10% opacity from the transfer points and loading operations

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Material Storage Piles (Z004)
Activity Description: Storage piles for limestone, coke, and coal

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
material storage piles	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	0.61 ton particulate emissions (PE)/yr
load-in and load-out of storage piles (see A.I.2.a. for identification of storage piles)	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	0.40 ton particulate matter less than 10 microns in size (PM10)/yr no visible emissions except for a period of time not to exceed one minute during any 60-minute observation period
wind erosion from storage piles (see A.I.2.a. for identification of storage piles)	OAC rule 3745-31-05 (A)(3) (PTI #03-13527, issued 5/23/02)	best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b. and A.I.2.c.) no visible emissions except for a period of time not to exceed one minute during any 60-minute observation period.
		best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.d. through A.I.2.e.)
		See A.I.2.f.
	40 CFR Part 52.21	See A.I.2.g.
	OAC rule 3745-31-10 through 20	
	OAC rule 3745-17-08(B)	See A.I.2.h.
	OAC rule 3745-17-07(B)(1)	See A.I.2.i.

2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 (A)(3) are listed below:

storage pile identification: all limestone, coke and coal storage piles

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

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

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

- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

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

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

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

- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

- 2.f** The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rule 3745-31-10 through 20.

2. Additional Terms and Conditions (continued)

- 2.g** The permittee shall employ best available control technology (BACT) to control fugitive dust from this emissions unit. BACT has been determined to be the following:
- i. Limestone Storage Piles: water application;
 - ii. Coal/Coke Storage Piles: low drop height; and
 - iii. Lime Kiln Dust Storage Piles: partial covering and water application (saturation).
- 2.h** 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), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.i** 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

storage pile identification: all limestone, coke, and coal storage piles

minimum load-in inspection frequency: daily
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: all limestone, coke, and coal storage piles

minimum load-out inspection frequency: daily
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: all limestone, coke, and coal storage piles

minimum wind erosion inspection frequency: daily
4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports in accordance with paragraph A.I.c.ii. of the General Terms and Conditions of this permit that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.61 ton PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance by summing the fugitive emissions from the Limestone, Coal/Coke, and Lime Kiln Dust storage piles, multiplying by 8760 hrs/yr, and then dividing by 2000 lbs/ton.

The permittee may demonstrate compliance as follows:

- i. for load-in and load-out operations, multiply the appropriate emission factor from AP-42, Chapter 13.2.4.3 (1/95) by the maximum throughput rate (tons/hr), and then multiply by the appropriate control factor*; and
 - ii. for wind erosion, multiply the appropriate emission factor from AP-42, Chapter 11.2.3 (5/83) by the size of the pile (acres), and then multiply by the appropriate control factor*.

*0% control efficiency for dust suppression of coal/coke piles

*75% control efficiency for dust suppression of limestone piles

*99% control efficiency for dust suppression of lime kiln dust piles

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
0.40 ton PM10/yr

Applicable Compliance Method:

The permittee may demonstrate compliance by summing the fugitive emissions from the Limestone, Coal/Coke, and Lime Kiln Dust storage piles, multiplying by 8760 hrs/yr, and then dividing by 2000 lbs/ton.

The permittee may demonstrate compliance as follows:

- i. for load-in and load-out operations, multiply the appropriate emission factor from AP-42, Chapter 13.2.4.3 (1/95) by the maximum throughput rate (tons/hr), and then multiply by the appropriate control factor*; and
- ii. for wind erosion, multiply the appropriate emission factor from AP-42, Chapter 11.2.3 (5/83) by the size of the pile (acres), and then multiply by the appropriate control factor*.

*0% control efficiency for dust suppression of coal/coke piles

*75% control efficiency for dust suppression of limestone piles

*99% control efficiency for dust suppression of lime kiln dust piles

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

Applicable Compliance Method:

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

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

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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