



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

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

05/15/02

**RE: Proposed Title V Chapter 3745-77 Permit
02-43-03-0257
LTV Steel Company, Inc.**

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for LTV Steel Company, Inc., has been created in Ohio EPA's State Air Resources System (STARS) on 05/15/02, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



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

cc: Northeast District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 05/15/02	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: 02-43-03-0257 to:
 LTV Steel Company, Inc.
 Williams Street
 P.O. Box 298
 Grand River, OH 44045

Emissions Unit ID (Company ID)	Emissions Unit Activity Description	Emissions Unit Activity Description
F001 (Roads and Parking Lots) Roads and Parking lots (Lime load out station, PLD and PUG, and Raw Stone).	Lime conveying from coolers to storage	P002 (Lime Kiln # 5) Manufacture of Lime
F007 (Lime Conveying)	P001 (Lime Kiln # 4) Manufacture of Lime	

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:

Northeast District Office
 2110 East Aurora Road
 Twinsburg, OH 44087
 (330) 425-9171

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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or 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. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (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 of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

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

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 the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

(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; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(For 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 (a) 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, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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 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

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

B. State Only Enforceable Section

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

F002-Ship unloading and limestone storage piles
F003-Limestone to kiln
F005-Conveying of lime from storage bins (scales, bins and chutes)
F006-PLD load-out system
F008-Slag unload and blend
P003-Silo #1
P004-Silo #2
P005-Silo #3
P006-Silo #4
P007-Hi Cal PLD silo
P901-Lime mixer
P902-#3 PLD silo
Z001-Stone fines transfer
Z002-Stone loading
Z003-Coal unloading
Z004-Coal conveying
Z005-Coal screening
Z006-Tank #1
Z007-Pugging Mill

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: Roads and Parking Lots (F001)

Activity Description: Roads and Parking lots (Lime load out station, PLD and PUG, and Raw Stone).

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>
Paved roadways and parking areas (Lime load out station, PLD and PUG, and Raw Stone). (See Section A.1.2.a.)	OAC rule 3745-17-07(B)(4)	There shall be no visible particulate emissions from any paved roadway or parking area at this facility except for a period of time not to exceed six minutes during any sixty-minute observation period as determined in accordance with paragraph (B)(4) of OAC rule 3745-17-03.
	OAC rule 3745-17-08(B),(B)(8) and (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections A.1.2.c., A.1.2.e. and A.1.2.h. through A.1.2.k.)
Unpaved roadways and parking areas (Lime load out station, PLD and PUG, and Raw Stone). (See Section A.1.2.b.)	OAC rule 3745-17-07(B)(5)	There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period as determined in accordance with paragraph (B)(4) of OAC rule 3745-17-03.
	OAC rule 3745-17-08(B), (B)(2)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections A.1.2.d-f, A.1.2.i., A.1.2.j.)

2. Additional Terms and Conditions

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

i. Paved Roadways:

All facility paved roadways including any public roadway contiguous to the facility where fugitive dust is directly caused by the deposition of materials due to any activities of the permittee.

ii. Paved Parking Areas

All facility paved parking areas

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

i. Unpaved Roadways

All facility unpaved roadways

ii. Unpaved Parking Areas

All facility unpaved parking areas

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

2.d The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water or suitable dust suppression chemicals 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 A maximum speed limit of 15 miles per hour on unpaved roads shall be posted and enforced on the property.

2.g 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.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or 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.i Open bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times.

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

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, and the specific control measure(s) implemented;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitations for the paved and unpaved roadways and parking areas identified 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)(d) 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: Lime Conveying (F007)
Activity Description: Lime conveying from coolers to storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Lime conveying from coolers to storage using bucket elevators, screens, bins and gates, and including all transfer points (equipped with a Sly fabric filter baghouse and an original Norblo 3-compartmented fabric filter baghouse)	OAC rule 3745-17-07(A)	Except as otherwise specified in paragraphs (A)(1) to (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the lime conveying baghouse outlet shall not exceed twenty percent opacity as a six-minute average, determined in accordance with OAC rule 3745-17-03(B)(1).
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from lime conveying operations, including fugitive emissions from all discharge points in this process, shall not exceed 20 (twenty) percent opacity as a three-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-08(B)(3)	<p>The use of hoods, fans, and other equipment (including fabric filter baghouses) to adequately enclose, contain, capture, vent and control the fugitive dust from the discharge and entrance of the lime conveyor. Such equipment shall meet the following requirements:</p> <p>(a) the collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust to the extent possible with good engineering design; and</p> <p>(b) the lime conveyor baghouse shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), whichever is less stringent.</p>

2. Additional Terms and Conditions

- 2.a All of the fabric filter baghouses associated with this emissions unit shall be used at all times when this emissions unit is in operation.
- 2.b The permittee shall continue to use and maintain the partial enclosure on the lime conveyor to ensure adequate enclosure.
- 2.c Nothing in this permit shall prohibit the permittee from employing additional control measures to ensure compliance with the requirements of OAC rules 3745-17-07 and -08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

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

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

3. The permittee shall document all baghouse inspections and maintenance work, including the dates, any problems discovered, and any remedial actions.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)
 - 1.b Emission Limitation:
20% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

V. Testing Requirements (continued)

1.c Emission Limitation:

Particulate emissions from the lime conveying baghouse shall achieve an emission rate of not greater than .030 grain of particulate matter per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the lime conveying baghouse exhaust outlet, whichever is less stringent.

Applicable Compliance Method:

OAC rule 3745-17-03(B)(7)

- 2.** The permittee shall conduct, or have conducted, emission testing of the lime conveying baghouse outlets in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate(s) for particulate emissions.
 - c. The following test method shall be employed to demonstrate compliance with the allowable emission rate(s) for particulate: Method 5 of 40 CFR, Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office and the Lake County Health Department. 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 Northeast District Office's refusal to accept the results of the emissions(s) tests.

Personnel from the Ohio EPA Northeast District Office or the Lake County Health Department 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 persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Lime Kiln # 4 (P001)

Activity Description: Manufacture of Lime

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Lime kiln #4 for calcining of limestone (equipped with electrostatic precipitator)	OAC rule 3745-17-07(A)	20 % opacity as a six-minute average, except as provided by rule
	OAC rule 3745-18-49(E)	10.0 pounds of sulfur dioxide per ton of product
	OAC rule 3745-17-11	46.9 pounds per hour of particulate emissions, based on Table I of OAC rule 3745-17-11 with a maximum process weight rate of 9.4 tph of coal and 54.5 tph of limestone

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The sulfur content of the coal burned in this emissions unit shall not exceed 1.5 %, by weight, based on a monthly composite sample of the coal burned. (This is the sulfur content of the coal that was burned during the last compliance test that demonstrated that the emissions unit was in compliance with its sulfur dioxide emissions limitation. The sulfur content restriction may be changed provided that the permittee demonstrates, through emissions testing, that the emissions unit is in compliance at all times with the sulfur dioxide emission limitation.)
2. The permittee shall operate the electrostatic precipitator during any operation of this emissions unit where particulate emissions would result .
3. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

III. Monitoring and/or Record Keeping Requirements

1. Statement of Certification-Opacity Monitoring

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Director or a representative of the Northeast District Office of the Ohio EPA or local air agency upon request.

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

Each continuous emission 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 records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Quality assurance/quality control

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

4. Requirements for the Sampling and Analysis of the Coal Burned

The permittee shall collect representative grab samples of the coal burned in this emissions unit on a frequency of at least two days per week. The coal samples shall be collected from the blowpipe of each kiln located between the coal pulverizers and the burners.

If twice per week sampling is not adequate to represent the average quality of the coal burned, additional individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit. At the end of each calendar month, all of the grab samples which are collected during that calendar month shall be combined into one composite sample.

The coal sampling shall be performed in accordance with ASTM method D2234, "Collection of a Gross Sample of Coal".

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

5. Each monthly composite sample of coal shall be analyzed for the following:
- % sulfur content by weight; and
 - heat content, in Btu/lb of coal.

The methods for analysis of the coal shall be as follows:

a. for sulfur content, " Total Sulfur in the Analysis Sample of Coal and Coke ", ASTM Method D3177, or ASTM Method D4239, " Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods"; and

b. for heat content, " Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter ", ASTM Method 2015; "Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter", ASTM Method D3286; or "Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters", ASTM Method 1989.

Any alternative analytical methods for those mentioned above, may be used upon written approval from the Ohio EPA, Northeast District Office.

6. The permittee shall record the following daily:
- the total quantity of coal burned in tons;
 - the total quantity of limestone fired, in tons;
 - the total quantity of lime produced, in tons;
 - the average sulfur content (%) of the coal burned; and
 - the average heat content (Btu/lb) of the coal burned.
7. The permittee shall calculate and record the sulfur dioxide emission rate for each day, based on the sulfur analysis of the coal burned and the amount of lime produced in that day, in pounds of sulfur dioxide per ton of product. This shall be determined by using the following equation:

Pounds of SO₂/ton of product = [(sulfur content of coal [weight%/100%] x pounds of coal burned) X (2 pounds SO₂/ pound sulfur)] / tons of lime produced

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

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

- the secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
- the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and
- the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

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

9. The permittee shall record the following information for each day:
 - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
 - b. the duration of the downtime for the monitoring equipment specified in Section A.III.8 above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Northeast District Office of the Ohio EPA documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, 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 Northeast District Office of the Ohio EPA 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 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.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any monthly record showing that the % sulfur content of the coal burned, based on the monthly composite sample, exceeded the 1.5 % sulfur content limit.
3. The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the sulfur dioxide emission rate exceeded 10 pounds per ton of lime produced.
4. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP did not comply with the operational restriction specified in section A.II.3. of this permit.
5. The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity, as a six- minute average, except as provided by rule

Applicable Compliance Method:

Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

46.9 pounds of particulate emissions per hour based on a maximum process weight rate of 63.9 tons per hour (9.4 tph coal and 54.5 tph limestone).

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-17-03(B)(10).

In addition, during the next test to demonstrate compliance for this emissions unit, the permittee shall determine the uncontrolled mass rate of emissions, as defined in OAC rule 3745-17-01, for this emissions unit and P002 by mass balance, with prior Ohio EPA approval of the mass balance methodology and calculations.

1.c Emission Limitation:

10.0 lbs of sulfur dioxide per ton of product

Applicable Compliance Method:

Compliance shall be based upon the emission testing performed in accordance with Section A.V.2 and the monitoring and record keeping requirements in Section A.III.

2. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates of 46.9 pounds per hour and that for sulfur dioxide of 10 pounds per ton of product.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

for sulfur dioxide, Method 6 or 6C of 40 CFR, Part 60, Appendix A; and

for particulates, Method 5 of 40 CFR, Part 60, Appendix A.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the Lake County Health Department. 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 tests and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Northeast District Office's refusal to accept the results of the emission tests.

Facility Name: **LTV Steel Company, Inc.**

Facility ID: **02-43-03-0257**

Emissions Unit: **Lime Kiln # 4 (P001)**

V. Testing Requirements (continued)

Personnel from the Northeast District Office or Lake County Health Department shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operations of the emissions unit and the testing 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 tests shall be signed by the person or persons responsible for the tests and submitted to the Northeast District Office of the Ohio EPA within 30 days following the completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Lime Kiln # 5 (P002)

Activity Description: Manufacture of Lime

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Lime kiln #5 for calcining of limestone (equipped with electrostatic precipitator)	OAC rule 3745-17-07(A)	20 % opacity as a six-minute average, except as provided by rule
	OAC rule 3745-18-49(E)	10.0 pounds of sulfur dioxide per ton of product
	OAC rule 3745-17-11	46.9 pounds per hour of particulate emissions, based on Table I of OAC rule 3745-17-11 with a maximum process weight rate of 9.4 tph of coal and 54.5 tph of limestone

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The sulfur content of the coal burned in this emissions unit shall not exceed 1.5 %, by weight, based on a monthly composite sample of the coal burned. (This is the sulfur content of the coal that was burned during the last compliance test that demonstrated that the emissions unit was in compliance with its sulfur dioxide emissions limitation. The sulfur content restriction may be changed provided that the permittee demonstrates, through emissions testing, that the emissions unit is in compliance at all times with the sulfur dioxide emission limitation.)
2. The permittee shall operate the electrostatic precipitator during any operation of this emissions unit where particulate emissions would result.
3. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

III. Monitoring and/or Record Keeping Requirements

1. Statement of Certification-Opacity Monitoring

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Director or a representative of the Northeast District Office of the Ohio EPA or local air agency upon request.

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

Each continuous emission 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 records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Quality assurance/quality control

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

4. Requirements for the Sampling and Analysis of the Coal Burned

The permittee shall collect representative grab samples of the coal burned in this emissions unit on a frequency of at least two days per week. The coal samples shall be collected from the blowpipe of each kiln located between the coal pulverizers and the burners.

If twice per week sampling is not adequate to represent the average quality of the coal burned, additional individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit. At the end of each calendar month, all of the grab samples which are collected during that calendar month shall be combined into one composite sample.

The coal sampling shall be performed in accordance with ASTM method D2234, "Collection of a Gross Sample of Coal".

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

5. Each monthly composite sample of coal shall be analyzed for the following:
- % sulfur content by weight; and
 - heat content, in Btu/lb of coal.

The methods for analysis of the coal shall be as follows:

a. for sulfur content, " Total Sulfur in the Analysis Sample of Coal and Coke ", ASTM Method D3177, or ASTM Method D4239, " Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods"; and

b. for heat content, " Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter ", ASTM Method 2015; "Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter", ASTM Method D3286; or "Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters", ASTM Method 1989.

Any alternative analytical methods for those mentioned above, may be used upon written approval from the Ohio EPA, Northeast District Office.

6. The permittee shall record the following daily:
- the total quantity of coal burned in tons;
 - the total quantity of limestone fired, in tons;
 - the total quantity of lime produced, in tons;
 - the average sulfur content (%) of the coal burned; and
 - the average heat content (Btu/lb) of the coal burned.
7. The permittee shall calculate and record the sulfur dioxide emission rate for each day, based on the sulfur analysis of the coal burned and the amount of lime produced in that day, in pounds of sulfur dioxide per ton of product. This shall be determined by using the following equation:

Pounds of SO₂/ton of product = [(sulfur content of coal [weight%/100%] x pounds of coal burned) X (2 pounds SO₂/ pound sulfur)] / tons of lime produced

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

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

- the secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
- the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and
- the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

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

9. The permittee shall record the following information for each day:
 - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
 - b. the duration of the downtime for the monitoring equipment specified in Section A.III.8 above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Northeast District Office of the Ohio EPA documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, 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 Northeast District Office of the Ohio EPA 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 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.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any monthly record showing that the % sulfur content of the coal burned, based on the monthly composite sample, exceeded the 1.5 % sulfur content limit.
3. The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the sulfur dioxide emission rate exceeded 10 pounds per ton of lime produced.
4. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP did not comply with the operational restriction specified in section A.II.3. of this permit.
5. The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity, as a six- minute average, except as provided by rule

Applicable Compliance Method:

Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

46.9 pounds of particulate emissions per hour based on a maximum process weight rate of 63.9 tons per hour (9.4 tph coal and 54.5 tph limestone).

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-17-03(B)(10).

In addition, during the next test to demonstrate compliance for this emissions unit, the permittee shall determine the uncontrolled mass rate of emissions, as defined in OAC rule 3745-17-01, for this emissions unit and P001 by mass balance, with prior Ohio EPA approval of the mass balance methodology and calculations.

1.c Emission Limitation:

10.0 lbs of sulfur dioxide per ton of product

Applicable Compliance Method:

Compliance shall be based upon the emission testing performed in accordance with Section A.V.2 and the monitoring and record keeping requirements in Section A.III.

2. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates of 46.9 pounds per hour and that for sulfur dioxide of 10 pounds per ton of product.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

for sulfur dioxide, Method 6 or 6C of 40 CFR, Part 60, Appendix A; and

for particulates, Method 5 of 40 CFR, Part 60, Appendix A.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the Lake County Health Department. 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 tests and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Northeast District Office's refusal to accept the results of the emission tests.

Facility Name: **LTV Steel Company, Inc.**

Facility ID: **02-43-03-0257**

Emissions Unit: **Lime Kiln # 5 (P002)**

V. Testing Requirements (continued)

Personnel from the Northeast District Office or Lake County Health Department shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operations of the emissions unit and the testing 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 tests shall be signed by the person or persons responsible for the tests and submitted to the Northeast District Office of the Ohio EPA within 30 days following the completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

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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