



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

June 29, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant
RE: Caremuse Lime, Inc / 089-6140-00112
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and

- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

**PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY
and the
Gary Department of Environmental Affairs**

**Carmeuse Lime Company
Buffington Station
Gary, Indiana 46402**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain New Source Review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T089-6140-00112	
Issued by: Original Signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 29, 2004 Expiration Date: June 29, 2009



TABLE OF CONTENTS

A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	9
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]	
B.3	Enforceability [326 IAC 2-7-7]	
B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(c)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(c)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]	
B.16	Permit Renewal [326 IAC 2-7-4]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.19	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.20	Source Modification Requirement [326 IAC 2-7-10.5]	
B.21	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC13-17-3-2] [IC 13-30-3-1] [IC 13- 17-3-2]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]	
C	SOURCE OPERATION CONDITIONS	20
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Opacity [326 IAC 5-1]	
C.2	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.3	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.4	Fugitive Dust Emissions [326 IAC 6-4]	
C.5	Fugitive Dust Emissions [326 IAC 6-1-11.1]	
C.6	Operation of Equipment [326 IAC 2-7-6(6)]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.9	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	
C.10	Compliance Requirements [326 IAC 2-1.1-11]	

TABLE OF CONTENTS (Continued)

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(c)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS 30

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.1.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]
- D.1.3 Lake County PM₁₀ Emission Requirements [326 IAC 6-1-10.1]
- D.1.4 Lake County SO₂ Emission Limitations [40 CFR Part 52, Subpart P]
- D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-7]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.7 Particulate Control
- D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.1.9 SO₂ Emissions [326 IAC 7-4-1.1] [326 IAC 3-7][326 IAC 2-7-6]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.10 Opacity Monitoring/ Visible Emission Monitoring [326 IAC 6-1-10.1(p)]
- D.1.11 Monitoring for Baghouses
- D.1.12 Baghouse Inspections [326 IAC 6-1-10.1(r)]
- D.1.13 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.14 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]
- D.1.15 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]
- D.1.16 Record Keeping Requirements
- D.1.17 Reporting Requirements

TABLE OF CONTENTS (Continued)

D.2 FACILITY OPERATION CONDITIONS 38

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

D.2.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]

D.2.3 Prevention of Significant Deterioration (PSD) and Emission Offset (EO) - Particulate [326 IAC 2-2] [326 IAC 2-3]

D.2.4 Particulate Matter Emissions [326 IAC 6-1-2]

D.2.5 Lake County PM₁₀ Emission Requirements [326 IAC 6-1-10.1]

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.2.7 Particulate Control

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.9 Visible Emissions Notations

D.2.10 Monitoring for Baghouses

D.2.11 Baghouse Inspections [326 IAC 6-1-10.1(r)]

D.2.12 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.13 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]

D.2.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

D.2.15 Record Keeping Requirements

D.2.16 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS 46

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) Emissions [326 IAC 6-1-2]

D.3.2 Lake County Fugitive Particulate Matter Control Requirements [326 IAC 6-1-11.1]

D.3.3 Fugitive Dust Emissions [326 IAC 6-4]

Compliance Determination Requirements

D.3.4 Particulate Matter (PM)

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

D.3.6 Reporting Requirements

Certification 50

Emergency Occurrence Report 51

Part 70 Monthly Report 52-58

Quarterly Report 59-60

Quarterly Deviation and Compliance Monitoring Report 61

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary lime manufacturing plant.

Responsible Official:	Vice President, Operations
Source Address:	Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
Mailing Address:	P.O. Box 689 Buffington Station, Gary, Indiana 46402
Source Phone Number:	773-978-5349
SIC Code:	3274
County Location:	Lake
Source Location Status:	Nonattainment for PM ₁₀ , SO ₂ , and ozone under 1-hour and 8-hour standards Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD; Emission Offset Rules and Nonattainment NSR 1 of 28 Source Categories Major Source under Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Lime Production

- (a) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-1; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-1; exhausting to stacks S-1A through S-1F.
- (b) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-2; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-2; exhausting to stacks S-2A through S-2F.
- (c) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-3; constructed in 1968; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-3; exhausting to stacks S-3A through S-3F.
- (d) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-4; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input

capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-4; exhausting to stacks S-4A through S-4F.

- (e) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-5; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-5; exhausting to stacks S-5A through S-5F.

Lime Processing and Handling

- (f) One (1) Lime Grinder; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (g) One (1) Grinding Mill #1; identified as EU-13; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-8; exhausting to stack S-8.
- (h) One (1) Grinding Mill #2; identified as EU-12; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-7; exhausting to stack S-7.
- (i) One (1) Pugmill #1; identified as EU-18; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-19; exhausting to stacks S-19.
- (j) One (1) Pugmill # 2; identified as EU-19; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-20; exhausting to stack S-20.
- (k) One (1) Lime Handling System #1; identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (l) One (1) Lime Handling System #2; identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15; exhausting to stack S-15.

Lime Storage and Loadout

- (m) One (1) Lime Storage System; identified as EU-24; constructed prior to 1977; consisting of six lime storage tanks; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (n) One (1) Lime Storage System; identified as EU-14; constructed prior to 1977; consisting of eight lime storage tanks; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (o) One (1) Truck & Rail Lime Loadout #3; identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13; exhausting to stack S-13.
- (p) One (1) Truck Lime Loadout #4; identified as EU-9; constructed in 1994; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-17; exhausting to stack S-17.

- (q) One (1) Truck Flue Dust Loadout #2; identified as EU-16; constructed in 1966; a maximum capacity of 28 tons of dust per hour; emissions controlled by baghouse CE-9; exhausting to stack S-9.
- (r) One (1) Truck Flue Dust Loadout #1; identified as EU-17; constructed in 1966; a maximum capacity of 32 tons of dust per hour; emissions controlled by baghouse CE-10; exhausting to stack S-10.
- (s) One (1) Rail Lime Loadout #2; identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (t) One (1) Truck Loadout Station; identified as EU-11; constructed prior to 1977; a maximum capacity of 300 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (u) One (1) Rail Re-Screen Loadout #2; identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (v) One (1) Truck Transfer Station Reclaim Hopper; identified as EU-32; constructed in 1972 and modified in 2003; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-32; exhausting to stack S-32.

Raw material Storage and Handling (Fugitive)

- (w) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions.
- (x) Two (2) Limestone Storage Piles; identified as EU-23 and EU-29; each a capacity of greater than 9.5 acres; a source of fugitive emissions.
- (y) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions.
- (z) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge unloading and assorted conveyors; a source of fugitive emissions.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Vehicular traffic on paved and unpaved roads, and parking lots with public access. [326 IAC 6-4] [326 IAC 6-1-11.1]
- (b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Assorted covered limestone conveyors; [326 IAC 6-1-2]
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Two (2) boilers with heat input capacities of 0.42 and 0.035 MMBtu per hour. [326 IAC 6-1-2(b)(3)]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the Gary Department of Environmental Affairs (Gary DEA).

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, and the Gary DEA, within a reasonable time, any information that IDEM, OAQ, and the Gary Department of Environmental Affairs, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, and the Gary DEA, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(c)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15th of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Gary DEA, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and the Gary Department of Environmental Affairs, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and the Gary DEA upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and the Gary DEA. IDEM, OAQ, and the Gary DEA may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for the unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the

affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, the Gary DEA, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

(IDEM, OAQ)

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(Gary DEA)

Telephone Number: (219) 882-3007

Facsimile Number: (219) 882-3012

(Northwest Regional Office)

Telephone Number: 1-888-209-8892 or 219-881-6712

Facsimile Number: 219-881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and the Gary DEA, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and the Gary DEA, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or the Gary DEA, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or the Gary DEA, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or the Gary DEA, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement

that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-7-5(6)(c)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(c)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, or the Gary DEA determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, or the Gary DEA to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, or the Gary DEA, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or the Gary DEA, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and the Gary DEA, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Gary DEA, on or before the date it is due.
- (2) If IDEM, OAQ, or the Gary DEA, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and the Gary DEA, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and the Gary DEA, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, and the Gary DEA, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and the Gary DEA, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC13-17-3-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, the Gary DEA, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, or the Gary DEA, the applicable fee is due April 1st of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP) attached as Appendix A to this permit.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 1-7-2, 1-7-3(c) and (d), 1-7-4, 1-7-5(a), (b), and (d), are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and the Gary DEA, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and the Gary DEA, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, and the Gary DEA, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, and the Gary DEA, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance as defined in 40 CFR 68 is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and the Gary DEA upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan to include such response steps taken.

The OMM Plan or Parametric Monitoring and SMM Plan shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such

additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120)

days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6. The emission statement shall meet the following requirements:
- (1) Indicate estimated actual emission of pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The emission statement does require the certification by the responsible official as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Department of Environmental Affairs on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years

as long as they are available upon request. If the Commissioner, or the Gary DEA, makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Gary DEA within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(c)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary DEA on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Lime Production

- (a) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-1; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-1; exhausting to stacks S-1A through S-1F.
- (b) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-2; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-2; exhausting to stacks S-2A through S-2F.
- (c) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-3; constructed in 1968; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-3; exhausting to stacks S-3A through S-3F.
- (d) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-4; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-4; exhausting to stacks S-4A through S-4F.
- (e) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-5; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-5; exhausting to stacks S-5A through S-5F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affect source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after January 5, 2004.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]

- (a) The affected source, the lime manufacturing plant, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing plants, (40 CFR Part 63, Subpart AAAAA). The affected source must comply with this rule on and after January 5, 2007. Pursuant to 40 CFR Part 63, Subpart AAAAA, the Permittee shall comply with the applicable emission limitations for the existing affected lime manufacturing plant, and shall complete all applicable performance tests no later than January 5, 2007.

- (b) Kilns EU-1 through EU-5 (along with the other facilities identified in Section D.2) comprise the affected source that is subject to 40 CFR Part 63, Subpart AAAAA.
- (c) The definitions of 40 CFR Part 63, Subpart AAAAA (at 40 CFR 63.7143) are applicable to the affected source.

D.1.3 Lake County PM₁₀ Emission Requirements [326 IAC 6-1-10.1]

- (a) Pursuant to 326 IAC 6-1-10.1, the facilities listed in the chart below shall not exceed the respective PM₁₀ emission limits:

Facility (as listed in 326 IAC 6-1-10.1)	Emission Unit ID	Control Device ID	PM ₁₀ Emission Limits	
			(lbs/ton)	(lbs/hr)
Rotary Kiln #1	EU-1	CE-1	0.478	9.950
Rotary Kiln #2	EU-2	CE-2	0.478	9.950
Rotary Kiln #3	EU-3	CE-3	0.478	9.950
Rotary Kiln #4	EU-4	CE-4	0.478	9.950
Rotary Kiln #5	EU-5	CE-5	0.478	9.950

- (b) Pursuant to 326 IAC 6-1-10.1, the Permittee shall implement the maintenance and inspection practices outlined in the Continuous Compliance Plan (CCP), dated March 1997.

D.1.4 Lake County SO₂ Emission Limitations [40 CFR Part 52, Subpart P]

Pursuant to 40 CFR Part 52, Subpart P:

- (a) The total sulfur dioxide (SO₂) emissions from the kilns (EU-1 through EU-5) shall not exceed 240 pounds per hour.
- (b) The SO₂ emissions from any one kiln (EU-1 through EU-5) shall not exceed 80 pounds per hour.
- (c) The SO₂ emissions shall be vented from the kilns/kiln gas filter systems at the following heights above grade:

Kiln Number	Stack Height (feet)
EU-1	80
EU-2	87
EU-3	87
EU-4	95
EU-5	89

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-7]

The total amount of lime produced from rotary kilns EU-1 through EU-5 shall not exceed 999,990 tons per twelve consecutive month period with compliance determined at the end of each month. The VOC emissions from each kiln shall not exceed 0.05 pounds per ton of lime produced.

Compliance with these limits is equivalent to source-wide VOC emissions of less than 25 tons per year and will render the requirements of 326 IAC 8-7 not applicable.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.7 Particulate Control

In order to comply with Condition D.1.2, the baghouses for particulate control shall be in operation and control particulate emissions from kilns EU-1 through EU-5 at all times those respective facilities are in operation.

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ and SO₂ testing on kilns EU-1 and EU-2 utilizing methods approved by the Commissioner. This testing is required in order to demonstrate compliance with 326 IAC 6-1-10.1 and 326 IAC 7-4-1.1. These tests shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ and SO₂ testing on kilns EU-3, EU-4, and EU-5 utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1.10.1 and 326 IAC 7-4-1.1 and shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) No later than 30 months following the issuance of this Part 70 permit, the Permittee shall perform VOC testing on each kiln (EU-1 through EU-5) utilizing methods approved by the Commissioner. These tests are required in order to ensure that the requirements of 326 IAC 8-7 do not apply and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.9 SO₂ Emissions [326 IAC 7-4-1.1][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4-1.1 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO₂ limits in Condition D.1.3 using one of the following options:

- (a) Mass Balance Calculations and Sampling and Analysis.
 - (1) Both limestone and coal are purchased under contract, and each contract contains specifications for sulfur content. Each shipment is sampled and analyzed by an independent laboratory, utilizing American Society for Testing and Materials (ASTM) standards for sampling and chemical analyzes. The analysis is provided for each 25,000-ton limestone shipment, and each 10,000-ton coal shipment. Note that each limestone shipment represents approximately five (5) days of feed, and the coal shipment represents approximately 14 days of fuel. The certified analyses shall be the source of the data of the sulfur content in both the limestone and coal. The Permittee shall calculate the hourly SO₂ emission rate using the total sulfur content and consumption rates of limestone and coal. In the event that a shipment of limestone or coal has been received which does not meet the specifications, steps shall be taken to correct the situation prior to the use of the material.
 - (A) The coal and limestone sample acquisition points shall be at locations where representative samples of the respective material shipments may be obtained.

- (B) Minimum sample size shall be in accordance with ASTM specifications for representative samples in the size fraction and quantity delivered.
 - (C) Samples shall be composited and analyzed in accordance with ASTM specifications.
 - (D) Preparation of the coal sample and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), and (e).
 - (E) The limestone and coal utilized shall be reconciled monthly by means of the weigh slips and shipping documents.
- (2) The Permittee shall calculate the amount of bound sulfur, in pounds per hour, exiting the kiln by performing calculations for weight and sulfur content of the lime and flue dust.
- (A) The weight of lime produced by each kiln shall be determined by either using a lime scale belt or by determining the cumulative weight of limestone fed to the kiln using the following relationships:

One (1.0) ton of lime is produced for each two and one-tenth (2.1) tons of high calcium limestone; and

One (1.0) ton of lime is produced for each two and twenty-seven hundredths (2.27) tons of dolomitic limestone.
 - (B) The weight of flue dust captured shall be determined by weigh slips from shipments and inventory balances, and reconciled monthly.
 - (C) The lime and flue dust sample acquisition points shall be at locations where representative samples of the total flow exiting the kilns may be obtained.
 - (D) Lime shall be sampled in accordance with ISO 9000 standards for shipments to customers.
 - (E) Samples shall be composited and analyzed in accordance with ISO 9000 standards, and at a frequency which will be representative of the materials utilized and produced from the raw materials.

- (3) The Permittee shall determine the calendar month average SO₂ emissions from each kiln by the following mass balance calculation using the input values determined in (1) and (2) above:

$$\text{SO}_2 \text{ Emissions} = [(\%S_{\text{limestone}} \times \text{Monthly Usage}_{\text{limestone}}) + (\%S_{\text{coal}} \times \text{Monthly Usage}_{\text{coal}}) - (\%S_{\text{lime}} \times \text{Monthly Production}_{\text{lime}}) - (\%S_{\text{fluedust}} \times \text{Monthly Production}_{\text{fluedust}})] \times 2$$

Where the %S values are given in calendar month averages.

- (b) Pursuant to 326 IAC 7-2-1(b), compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the kilns, using 40 CFR Part 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) above.

D.1.10 Opacity Monitoring / Visible Emission Monitoring [326 IAC 6-1-10.1(p)]

- (a) Pursuant to 326 IAC 6-1-10.1(p), the Permittee shall monitor the opacity of the exhaust from stacks S-1 through S-5 (exhausting emissions from kilns EU-1 through EU-5) during normal operation through self monitoring of opacity (visible emission notations). The opacity monitoring tests shall be performed in accordance with Method 9 of 40 CFR Part 60, Appendix A and shall be performed once per shift during normal daylight operations. Readings shall be taken for a minimum of thirty (30) minutes during each shift. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the opacity readings are greater than seventy-five percent (75%) of the applicable standard. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
- (b) If the Method 9 tests (required in (a) above) can not be performed due to the position of the sun, inclement weather, etc., then the Permittee shall perform visible emission notations of the exhaust from stacks S-1 through S-5 once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

D.1.11 Monitoring for Baghouses

- (a) The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with kilns EU-1 through EU-5, at least once per shift when the respective facilities are in operation.
- (b) When, for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the last stack test or as indicated in the Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.12 Baghouse Inspections [326 IAC 6-1-10.1(r)]

The Permittee shall perform the baghouse inspections pursuant to the Continuous Compliance Plan (CCP) and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter. Inspections required by this condition shall be not be performed in consecutive months.

D.1.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]

- (a) Pursuant to 40 CFR 63.7130, the Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4) and (5); 63.7(b) and (c); 63.8(e); (f)(4) and (6); and 63.9 (a) through (j) that apply to the affected source and chosen compliance method, by the dates specified. These notifications include but are not limited to the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than May 5, 2004.
 - (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7130(d).
 - (3) If required to conduct a performance test, design evaluation, opacity observation, visible emissions observation, or other initial compliance demonstration as specified in Table 3 or 4 to 40 CFR 63, Subpart AAAAA, a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 63.7130(e). The Notification of Compliance Status must be submitted:
 - (A) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration required in Table 3 to 40 CFR 63, Subpart AAAAA, that does not include a performance test; and
 - (B) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration required in Table 5 to 40 CFR Part 63, Subpart AAAAA

that includes a performance test conducted according to the requirements in Table 4 to 40 CFR 63, Subpart AAAAA.

- (4) If required to conduct opacity or visible emissions observations as required by Table 4 to 40 CFR 63 Subpart AAAAA, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7130(a).

- (b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.15 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR Part 63, Subpart AAAAA, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than April 5, 2006.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs

Suite 1012, 504 N. Broadway
Gary, Indiana 46402

D.1.16 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5 the Permittee shall maintain records of the amount of lime produced by kilns EU-1 through EU-5.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain records of the sampling and analysis of raw materials, product, and by-products, and the mass balance equations used to demonstrate compliance with Condition D.1.3.
- (d) To document compliance with Condition D.1.10, the Permittee shall maintain records of:
 - (1) All opacity measurements, evaluations, calibration checks, adjustments, and maintenance performed on the continuous monitoring system; or
 - (2) The once per shift visible emission notations required by Condition D.1.10.
- (e) To document compliance with Condition D.1.11, the Permittee shall maintain records of the once per shift total static pressure drop required by Condition D.1.11.
- (f) To document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the three (3) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A quarterly summary of the information to document compliance with Condition D.1.9 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the three (3) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Lime Processing and Handling

- (f) One (1) Lime Grinder; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (g) One (1) Grinding Mill #1; identified as EU-13; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-8; exhausting to stack S-8.
- (h) One (1) Grinding Mill #2; identified as EU-12; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-7; exhausting to stack S-7.
- (i) One (1) Pugmill #1; identified as EU-18; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-19; exhausting to stacks S-19.
- (j) One (1) Pugmill # 2; identified as EU-19; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-20; exhausting to stack S-20.
- (k) One (1) Lime Handling System #1; identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (l) One (1) Lime Handling System #2; identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15; exhausting to stack S-15.

Lime Storage and Loadout

- (m) One (1) Lime Storage System; identified as EU-24; constructed prior to 1977; consisting of six lime storage tanks; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (n) One (1) Lime Storage System; identified as EU-14; constructed prior to 1977; consisting of eight lime storage tanks; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (o) One (1) Truck & Rail Lime Loadout #3; identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13; exhausting to stack S-13.
- (p) One (1) Truck Lime Loadout #4; identified as EU-9; constructed in 1994; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-17; exhausting to stack S-17.
- (q) One (1) Truck Flue Dust Loadout #2; identified as EU-16; constructed in 1966; a maximum capacity of 28 tons of dust per hour; emissions controlled by baghouse CE-9; exhausting to stack S-9.
- (r) One (1) Truck Flue Dust Loadout #1; identified as EU-17; constructed in 1966; a maximum capacity of 32 tons of dust per hour; emissions controlled by baghouse CE-10; exhausting to stack S-10.

Facility Description [326 IAC 2-7-5(15)]:

- (s) One (1) Rail Lime Loadout #2; identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (t) One (1) Truck Loadout Station; identified as EU-11; constructed prior to 1977; a maximum capacity of 300 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (u) One (1) Rail Re-Screen Loadout #2; identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (v) One (1) Truck Transfer Station Reclaim Hopper; identified as EU-32; constructed in 1972 and modified in 2003; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-32; exhausting to stack S-32.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after January 5, 2004.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.2.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]

- (a) The affected source, the lime manufacturing plant, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing plants, (40 CFR Part 63, Subpart AAAAA). The affected source must comply with this rule on and after January 5, 2007. Pursuant to 40 CFR Part 63, Subpart AAAAA, the Permittee shall comply with the applicable emission limitations for the existing affected lime manufacturing plant, and shall complete all applicable performance tests no later than January 5, 2007.
- (b) All of the facilities listed in this section (along with the other facilities identified in Section D.1) comprise the affected source that is subject to 40 CFR Part 63, Subpart AAAAA.
- (c) The definitions of 40 CFR Part 63, Subpart AAAAA (at 40 CFR 63.7143) are applicable to the affected source.

D.2.3 Prevention of Significant Deterioration (PSD) and Emission Offset (EO) - Particulate [326 IAC 2-2] [326 IAC 2-3]

- (a) The PM emissions from pugmill EU-18 shall not exceed 0.186 pounds per ton of lime processed.

- (b) The PM emissions from pugmill EU-19 shall not exceed 0.186 pounds per ton of lime processed.
- (c) The total lime processed by pugmills EU-18 and EU-19 (combined) shall not exceed 268,000 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with these limits is equivalent to PM emissions of less than 25 tons per year and will render the requirements of 326 IAC 2-2 not applicable.

- (d) The PM/PM10 emissions from Truck Lime Loadout #4 (EU-9) shall not exceed 3.4 pounds per hour and 15 tons per year.

Compliance with this limit will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

- (e) Pursuant to CP 089-5851-00112, issued December 9, 1996, and as revised by this permit, the PM/PM10 emissions from Re-Screen Loadout #2 (EU-25) shall not exceed 3.4 pounds per hour and 15 tons per year.

Compliance with this limit will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

D.2.4 Particulate Matter Emissions [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the particulate matter emissions from the Truck Lime Loadout #4 (EU-9), Pugmill #1 (EU-18), Pugmill #2 (EU-19), Rail Re-Screen Loadout #2 (EU-25), and Truck Transfer Station Reclaim Hopper (EU-32) shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.2.5 Lake County PM₁₀ Emission Requirements [326 IAC 6-1-10.1]

- (a) Pursuant to 326 IAC 6-1-10.1, the facilities listed in the chart below shall not exceed the respective PM₁₀ emission limits:

Facility (as listed in 326 IAC 6-1-10.1)	Emission Unit(s) ID	Control Device ID	PM ₁₀ Emission Limits	
			(lbs/ton)	(lbs/hr)
Fluedust Loadout #1	EU-17	CE-10	0.003	0.110
Fluedust Loadout #2	EU-16	CE-9	0.003	0.100
Lime Grinder	EU-15 EU-14	CE-6	0.015	0.44
Lime Handling Baghouse #1	EU-6, EU-24, and EU-28	CE-14	0.002	0.260
Lime Handling Baghouse #2	EU-7	CE-15	0.002	0.180
Lime Handling Baghouse #3	EU-8	CE-13	0.0004	0.050
Lime Handling Baghouse #4	EU-11	CE-25	0.001	0.13
Lime Loadout Baghouse #1	EU-12	CE-7	0.0004	0.050
Lime Loadout Baghouse #2	EU-13	CE-8	0.0004	0.050

- (b) Pursuant to 326 IAC 6-1-10.1, the Permittee shall implement the maintenance and inspection practices outlined in the Continuous Compliance Plan (CCP), dated March 1997.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.7 Particulate Control

In order to comply with Conditions D.2.1, D.2.2, and D.2.3 the baghouses for particulate control shall be in operation and control particulate emissions from all facilities listed in this section at all times those respective facilities are in operation.

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) No later than 18 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on the Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Truck Loadout Station (EU-11) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) No later than 36 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on the Lime Grinder (EU-15), Lime Storage System (EU-14), Lime Handling System #2 (EU-7), and the Truck & Rail Lime Loadout #3 (EU-8) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.9 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust from facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13 and EU-32 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

D.2.10 Monitoring for Baghouses

- (a) The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13, and EU-32 at least once per shift when the respective facilities are in operation.
- (b) When, for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the last stack test or as indicated in the Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.11 Baghouse Inspections [326 IAC 6-1-10.1(r)]

The Permittee shall perform the baghouse inspections pursuant to the CCP and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter. Inspections required by this condition shall not be performed in consecutive months.

D.2.12 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.13 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]

- (a) Pursuant to 40 CFR 63.7130, the Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4) and (5); 63.7(b) and (c); 63.8(e); (f)(4) and (6); and 63.9 (a) through (j) that apply to the affected source and chosen compliance method, by the dates specified. These notifications include but are not limited to the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than May 5, 2004.
 - (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7130(d).
 - (3) If required to conduct a performance test, design evaluation, opacity observation, visible emissions observation, or other initial compliance demonstration as specified in Table 3 or 4 to 40 CFR 63, Subpart AAAAA, a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 63.7130(e). The Notification of Compliance Status must be submitted:
 - (A) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration required in Table 3 to 40 CFR 63, Subpart AAAAA, that does not include a performance test; and
 - (B) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration required in Table 5 to 40 CFR Part 63, Subpart AAAAA that includes a performance test conducted according to the requirements in Table 4 to 40 CFR 63, Subpart AAAAA.
 - (4) If required to conduct opacity or visible emissions observations as required by Table 4 to 40 CFR 63 Subpart AAAAA, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7130(a).
- (b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.2.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR Part 63, Subpart AAAAA, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than April 5, 2006.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

D.2.15 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3(c), the Permittee shall maintain records of the total amount of lime processed by facilities EU-18 and EU-19.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.2.9, the Permittee shall maintain records of the once per shift visible emission notations required by Condition D.2.9.
- (d) To document compliance with Condition D.2.10, the Permittee shall maintain records of the once per shift total static pressure drop required by Condition D.2.10.
- (e) To document compliance with Condition D.2.11, the Permittee shall maintain records of the results of the inspections.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3(c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit,

using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the three (3) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Raw material Storage and Handling (Fugitive)

- (w) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions.
- (x) Two (2) Limestone Storage Piles; identified as EU-23 and EU-29; each a capacity of greater than 9.5 acres; a source of fugitive emissions.
- (y) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions.
- (z) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge unloading and assorted conveyors; a source of fugitive emissions.

Specifically Regulated Insignificant Activities

- (a) Vehicular traffic on paved and unpaved roads, and parking lots with public access. [326 IAC 6-4] [326 IAC 6-1-11.1]
- (b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Assorted covered limestone conveyors; [326 IAC 6-1-2]
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Two (2) boilers with heat input capacities of 0.42 and 0.035 MMBtu per hour. [326 IAC 6-1-2(b)(3)]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) Emissions [326 IAC 6-1-2]

- (a) Pursuant to 326 IAC 6-1-2, the PM emissions from EU-22, EU-23, EU-29, EU-30, EU-31, and the insignificant limestone conveyors, shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).
- (b) Pursuant to 326 IAC 6-1-2(b)(3), the PM emissions from the insignificant boilers shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf).

D.3.2 Lake County Fugitive Particulate Matter Control Requirements [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1, compliance with the opacity limits specified in Section C (Fugitive Dust Emissions) of this permit shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP) attached as Appendix A to this permit. If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

D.3.3 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

Compliance Determination Requirements

D.3.4 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities (as applicable) shall be determined as follows:

- (a) **Paved Roads and Parking Lots**
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:
 - (1) The first will be taken at the time of emission generation.
 - (2) The second will be taken five (5) seconds later.
 - (3) The third will be taken five (5) seconds later or ten (10) seconds after the first.The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.
- (b) **Unpaved Roads and Parking Lots**
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.
- (c) **Batch Transfer**
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
- (d) **Continuous Transfer**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.
- (e) **Wind Erosion from Storage Piles**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.
- (f) **Wind Erosion from Exposed Areas**

The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

- (g) **Material Transported by Truck or Rail**
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.
- (h) **Material Transported by Front End Loader or Skip Hoist**
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:
- (1) The first will be taken at the time of emission generation.
 - (2) The second will be taken five (5) seconds later.
 - (3) The third will be taken five (5) seconds later or ten (10) seconds after the first.
- The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.
- (i) **Material Processing Limitations**
Compliance with all opacity limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.
- (j) **Dust Handling Equipment**
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements):

- (a) The source shall keep the following documentation to show compliance with each of its control measures and control practices:
- (1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.
 - (2) For each application of water or chemical solution to roadways, the following shall be recorded:
 - (A) The name and location of the roadway controlled
 - (B) Application rate (as indicated on control plan)
 - (C) Time of each application

- (D) Width of each application
 - (E) Identification of each method of application
 - (F) Total quantity of water or chemical used for each application
 - (G) For each application of chemical solution, the concentration and identity of the chemical
 - (H) The material data safety sheets for each chemical
- (3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:
- (A) The name of the agent
 - (B) Location of application
 - (C) Application rate
 - (D) Total quantity of agent used
 - (E) If diluted, percent of concentration
 - (F) The material data safety sheets for each chemical
- (4) A log recording incidents when control measures were not used and a statement of explanation.
- (5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.6 Reporting Requirements

- (a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted, stating the following:
- (1) The dates any required control measures were not implemented
 - (2) A listing of those control measures
 - (3) The reasons that the control measures were not implemented
 - (4) Any corrective action taken
- (b) These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and the Gary Department of Environmental Affairs**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Carmeuse Lime Company
Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
Part 70 Permit No.: T089-6140-00112

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

and the Gary Department of Environmental Affairs

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Carmeuse Lime Company
Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
Part 70 Permit No.: T089-6140-00112

This form consists of 2 pages

Page 1 of 2

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Monthly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facility: Rotary Kiln #1 (EU-1)
 Limit: 80 pounds of SO2 per hour

Time/ Date of Sample	Sulfur Content of Limestone (%S wt.)	Throughput of Limestone (lb/hr)	Sulfur Content of Coal (%S wt.)	Throughput of Coal (lb/hr)	Sulfur Content of Lime (%S wt.)	Lime Production (lb/hr)	Sulfur Content of Flue Dust (%S wt.)	Flue Dust Production (lb/hr)	SO2 Emissions (lb/hr)

9 No deviation occurred in this month.
 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Monthly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facility: Rotary Kiln #2 (EU-2)
 Limit: 80 pounds of SO2 per hour

Time/ Date of Sample	Sulfur Content of Limestone (%S wt.)	Throughput of Limestone (lb/hr)	Sulfur Content of Coal (%S wt.)	Throughput of Coal (lb/hr)	Sulfur Content of Lime (%S wt.)	Lime Production (lb/hr)	Sulfur Content of Flue Dust (%S wt.)	Flue Dust Production (lb/hr)	SO2 Emissions (lb/hr)

9 No deviation occurred in this month.
 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Monthly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facility: Rotary Kiln #3 (EU-3)
 Limit: 80 pounds of SO2 per hour

Time/ Date of Sample	Sulfur Content of Limestone (%S wt.)	Throughput of Limestone (lb/hr)	Sulfur Content of Coal (%S wt.)	Throughput of Coal (lb/hr)	Sulfur Content of Lime (%S wt.)	Lime Production (lb/hr)	Sulfur Content of Flue Dust (%S wt.)	Flue Dust Production (lb/hr)	SO2 Emissions (lb/hr)

9 No deviation occurred in this month.
 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Monthly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facility: Rotary Kiln #4 (EU-4)
 Limit: 80 pounds of SO2 per hour

Time/ Date of Sample	Sulfur Content of Limestone (%S wt.)	Throughput of Limestone (lb/hr)	Sulfur Content of Coal (%S wt.)	Throughput of Coal (lb/hr)	Sulfur Content of Lime (%S wt.)	Lime Production (lb/hr)	Sulfur Content of Flue Dust (%S wt.)	Flue Dust Production (lb/hr)	SO2 Emissions (lb/hr)

9 No deviation occurred in this month.
 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Monthly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facility: Rotary Kiln #5 (EU-5)
 Limit: 80 pounds of SO2 per hour

Time/ Date of Sample	Sulfur Content of Limestone (%S wt.)	Throughput of Limestone (lb/hr)	Sulfur Content of Coal (%S wt.)	Throughput of Coal (lb/hr)	Sulfur Content of Lime (%S wt.)	Lime Production (lb/hr)	Sulfur Content of Flue Dust (%S wt.)	Flue Dust Production (lb/hr)	SO2 Emissions (lb/hr)

9 No deviation occurred in this month.
 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Quarterly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facilities: Rotary kilns EU-1 through EU-5
 Parameter: Lime produced
 Limit: The total amount of lime produced from rotary kilns EU-1 through EU-5 shall not exceed 999,990 tons per twelve consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Lime Produced	Lime Produced	Lime Produced
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

Part 70 Quarterly Report

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112
 Facilities: Pugmills EU-18 and EU-19
 Parameter: Lime processed
 Limit: The total lime processed by pugmills EU-18 and EU-19 shall not exceed 268,000 tons per twelve consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Lime Processed	Lime Processed	Lime Processed
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 Compliance Data Section
 and the Gary Department of Environmental Affairs**

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Carmeuse Lime Company
 Source Address: Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
 Mailing Address: P.O. Box 689 Buffington Station, Gary, Indiana 46402
 Part 70 Permit No.: T089-6140-00112

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for Part 70 Permit

Source Background and Description

Source Name:	Carmeuse Lime Company
Source Location:	Clark Road and Lake Michigan - Buffington Station, Gary, IN 46402
County:	Lake
SIC Code:	3274
Operation Permit No.:	T089-6140-00112
Permit Reviewer:	ERG/BS

On January 16, 2004 the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) had a notice published in the Post Tribune of Merrillville, Indiana and The Times of Munster, Indiana, stating that Carmeuse Lime Company ("Carmeuse") had applied for a Part 70 Permit relating to the operation of a stationary lime manufacturing plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 20, 2004, Carmeuse submitted comments on the proposed Part 70 Permit. A summary of the comments, and the corresponding OAQ responses, is contained in this document. Text with a line through it has been deleted and bold text has been added. The Table of Contents has been updated as necessary.

Comment 1:

On Thursday, January 22, 2004, the United States Environmental Protection Agency (EPA) published a final rule, *Revisions To Clarify the Scope of Certain Monitoring Requirements for Federal and State Operating Permits Programs*, in the Federal Register. The rule becomes effective on February 23, 2004. The rule ratifies certain language of the state and federal operating permits program rules under Title V of the Clean Air Act (CAA) pertinent to monitoring requirements. In addition, the EPA announced its decision to decline to adopt the changes to the regulatory text of the monitoring rules that were proposed on Sept. 17, 2002.

The final rule also states EPA's different interpretation of the "umbrella monitoring" rules (40 CFR Sections 70.6(c)(1) and 71.6(c)(1)) from that set forth in the preamble to the September proposal. The EPA has determined that the "correct interpretation" of umbrella monitoring rules is that they do not establish a separate regulatory standard or basis for requiring or authorizing review and enhancement of existing monitoring independent of any review and enhancement as might be required under other provisions of the operating permits rules. According to the EPA, Umbrella Monitoring rules do not provide a basis for adding monitoring to Title V permits independent of monitoring required under existing federal air pollution control rules and State implementation plan (SIP) rules (i.e., monitoring required under applicable regulations).

EPA's interpretation of the Umbrella Monitoring rule is to require that Title V permits contain monitoring required under applicable requirements, including monitoring required under the compliance assurance monitoring (CAM) rule where it applies, and such monitoring as may be required under the periodic monitoring rules. Together, such monitoring will constitute monitoring sufficient to assure compliance with the Act, according to the EPA.

Based on the above, adding any additional monitoring and stack testing, for sources for which the underlying regulations already specify monitoring and recordkeeping requirements, is unwarranted and is contrary to the State and Federal Title V regulations.

Response to Comment 1:

While the IDEM, OAQ recognizes the U.S. EPA's action and its interpretation of the federal provisions, the action does not affect the OAQ's ability or authority to require compliance monitoring in Part 70 permits. Indiana's Part 70 (326 IAC 2-7-5) rules concerning compliance monitoring are significantly different than the corresponding federal counterpart (40 CFR 70.6). 40 CFR 70.6(c)(1) states that all Part 70 permits shall contain sufficient compliance monitoring to demonstrate compliance. The provisions of 326 IAC 2-7-5(3) state that the Part 70 permits must include: "Monitoring and related record keeping and reporting requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements." The need to ensure continuous compliance in 326 IAC 2-7-5(3) gives IDEM broader authority than what is specified in 40 CFR 70.6(c)(1). In addition, the language of 326 IAC 2-7-5(3) clearly suggests that existing federal monitoring requirements are considered only as minimum permit requirements. Therefore, the difference between the corresponding state and federal rules results in IDEM's warranted and legal ability to institute additional and more stringent compliance monitoring.

See Response to Comment 5 regarding the IDEM's authority to include testing requirements.

No changes were made in response to this comment.

Comment 2:

Carmeuse is currently in compliance with the relevant sulfur/sulfur dioxide limitations. Contrary to the assertion contained in Condition D.1.3 of the draft Part 70 permit, the IDEM, OAQ has not alleged that all five kilns exceeded applicable sulfur/sulfur dioxide limitations. Rather, the IDEM OAQ has alleged a violation as to kiln EU-5 only, based on an August 2001 stack test. Subsequent stack testing of the subject kiln demonstrated compliance with the emission limitations. Subsequent testing of other kilns also demonstrated compliance with the sulfur/sulfur dioxide limitations. Except for the alleged violation, the Permit Shield should apply to the kilns. Therefore, Carmeuse requests that IDEM, OAQ make the following changes to Condition D.1.3:

*"The IDEM, OAQ has issued a notice of violation alleging that kiln s ~~EU-1 through EU-5~~ are was out of compliance with 326 IAC 7-4-1.1 and 40 CFR Part 52 Subpart P **based upon stack testing of that kiln**. Therefore, the Permit Shield provided in Section B of this permit does not apply to ~~those~~ **that** emission units with regards to **the alleged violation of 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P**. The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to comply with 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P, and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed and resolved. **However, subsequent testing of kiln EU-5 and other kilns demonstrates compliance so the Permit Shield otherwise applies to all five kilns**".*

Response to Comment 2:

Upon further review of the corresponding Notice Of Violation (Case No. 2002-11228-A), IDEM has determined that only one kiln (EU-5) was found to be out of compliance based on stack testing completed in August 2001. However, that kiln was retested in September 2002 and was determined to be in compliance. As a result, Condition D.1.3 has been removed from the permit and the conditions renumbered accordingly.

~~D.1.3 Sulfur Dioxide (SO₂) Emissions [326 IAC 7-4-1.1][40 CFR Part 52, Subpart P][326 IAC 2-7-6(3)][326 IAC 2-7-15]~~

~~The IDEM, OAQ has issued a notice of violation alleging that kilns EU-1 through EU-5 are out of compliance with 326 IAC 7-4-1.1 and 40 CFR Part 52 Subpart P. Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to violation of 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P. The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to comply with 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P, and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed and resolved.~~

Comment 3:

Condition D.1.4 states that the PM₁₀ emissions from each kiln, pursuant to 326 IAC 6-1-10.1, are limited to 0.478 pounds per ton of lime produced and 9.95 pounds per hour. The PM₁₀ emission factor (0.478 lbs per ton of lime produced) in conjunction with the maximum output capacity of a kiln (23.3 tons per hour) yields potential hourly PM₁₀ emissions of 11.1 lbs per hour which is inconsistent with the stated emission limit of 9.950 lbs per hour.

Response to Comment 3:

As stated by Carmeuse Lime, 326 IAC 6-1-10.1 limits the PM₁₀ emissions from each kiln to less than 0.478 pounds per ton of lime produced and 9.95 pounds per hour. While the pound per ton emission limit, when coupled with the maximum production capacity, does exceed the 9.95 pound per hour limit, this does not give Carmeuse the authority to exceed any limit contained in 326 IAC 6-1-10.1. If Carmeuse believes that the 9.95 pound per hour limit is unreasonable, then Carmeuse Lime may request a revision to 326 IAC 6-1-10.1.

No changes were made in response to this comment.

Comment 4:

The production restrictions and VOC emission limitations contained in Condition D.1.6 appear to be new limits. The Title V program does not allow the imposition of new or more restrictive emissions limitations except when an existing or new underlying regulation contains those limits. Carmeuse is not aware of any regulatory requirement to accept new production or emission limitations to avoid the applicability of 326 IAC 8-7. Carmeuse is not a large source of VOC emissions and is not aware of operating any sources that would be subject to the emission limits of 326 IAC 8-7-3. 326 IAC 8-7-2(b) indicates that facilities listed in 326 IAC 8-7-2(2)(a)(2) which includes fuel combustion facilities (including process heaters and furnaces) are exempt from the emission limit requirements of 8-7-3. The lime kilns would be considered fuel combustion facilities and are therefore exempt from 326 IAC 8-7-3. Based on the above, Carmeuse requests that Condition D.1.6 be removed from the Part 70 permit.

Response to Comment 4:

Pursuant to 326 IAC 2-7-6, each Part 70 permit shall include whatever requirements are necessary to ensure continuous compliance with all applicable requirements. The omission of the applicability of 326 IAC 8-7 in previous permits/approvals does not shield Carmeuse from its applicability. As a result, IDEM's Title V program maintains the authority to include or impose requirements not previously in permits in order to encapsulate all applicable rules and ensure continuous compliance.

Pursuant to 326 IAC 8-7-2(a), this rule shall apply to stationary sources located in Lake, Porter, Clark, or Floyd County that emit or have the potential to emit volatile organic compounds (VOCs) at levels equal to or greater than twenty-five (25) tons per year. IDEM recognizes that 326 IAC 8-7-2(b) specifically exempts facilities listed in 326 IAC 8-7-2(a)(1) and (a)(2); which includes "fuel combustion facilities". However, the rotary kilns do not meet the definition of "fuel combustion facilities" pursuant to 326 IAC 8-7-1(5) because the kilns are obviously not "used exclusively for the purpose of producing steam ..."

Carmeuse may provide (at a later date) to the IDEM, OAQ, additional emission data that illustrates compliance with the pound per ton limit in support of a request to increase the corresponding production limit. If the appropriate information is presented, such a change may be performed with a permit modification pursuant to 326 IAC 2-7-12.

Comment 5:

Particulate matter regulations contained in 326 IAC 6-1-10.1 include various requirements for specific sources located in Lake County, including the Carmeuse facility (referred to in the regulations as Marblehead Lime). As discussed in Comment 1, including any additional monitoring and stack testing, for sources for which the underlying regulations already specify monitoring and recordkeeping requirements, is unwarranted and is contrary to the State and Federal Title V regulations.

Certain sources have been required by 326 IAC 6-1-10.1 to install opacity monitors, but the Carmeuse plant is not among them; therefore, the omission of such a requirement demonstrates that IDEM has evaluated the appropriate testing and monitoring requirements and determined that Carmeuse is not required to install and operate an opacity monitor.

Certain sources, including the Carmeuse facility, have been required by 326 IAC 6-1-10.1 to prepare and implement Continuous Compliance Plans (CCP) for PM₁₀ emissions. There are numerous inspection/monitoring/recordkeeping obligations required by the CCP (e.g., daily inspections include pressure drop and cleaning cycle; weekly inspections include moving parts on discharge system and temperature indicating equipment; monthly inspections include bag seating condition; as well as quarterly and annual inspection requirements).

With respect to SO₂, Condition D.1.10 requires monitoring of feedstock and product sulfur content to be utilized in calculating SO₂ emissions based upon a mass balance approach. This mass balance approach conservatively assumes that all sulfur emitted to atmosphere from the kiln stacks is SO₂ and therefore, stack testing would appear to be redundant and hence unnecessary. VOC emissions are minimal from high temperature combustion processes. In addition, 326 IAC 8-7-2(b) indicates that facilities listed in 326 IAC 8-7-2(a)(2) which includes fuel combustion facilities (including process heaters and furnaces) are exempt from the emission limit requirements of 8-7-3.

Based upon the recently promulgated regulation discussed in Comment 1, the monitoring requirements embodied in the state regulations for the CCP, the sulfur content monitoring requirements, and minimal VOC emissions associated with the kilns Carmeuse requests that the current language in Condition D.1.9 be removed from the proposed Part 70 permit and replaced with the following language.

"The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11."

If an underlying regulatory requirement mandates that a certain amount of testing be performed, Carmeuse concludes that the quantity and frequency of testing is excessive. Each kiln's baghouse has six associated stacks. Requiring testing of all five kilns would result in the need to perform 90 one-hour tests (3 one-hour tests per stack for 30 stacks). For units that are similar/identical it is only necessary to test a representative number of emission units. It is Carmeuse's understanding that IDEM typically considers testing of approximately 25% of similar/identical sources to be representative. The five rotary lime kilns can be considered identical in that they have the same throughput specifications and utilize the same raw material and fuel feedstocks. In this instance, Carmeuse believes that testing one of the five kilns (i.e., 20%) should be considered representative. The frequency of the proposed stack testing should be reduced to every five (5) years from the proposed frequency of every two and one-half (2.5) years. Should Condition D.1.9 not be eliminated, our proposed revisions to the testing requirements for the rotary kilns would be as follows:

- "(a) No later than ~~42~~ 30 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on **one of the kilns EU-1 and through EU-35** utilizing methods approved by the Commissioner. ~~No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on kilns EU-2, EU-4, and EU-5 utilizing methods approved by the Commissioner.~~ This testing is required in order to demonstrate compliance with 326 IAC 6-1-10.1. These tests shall be repeated at least once every 2.5 5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.*
- (b) No later than ~~42~~ 30 months following the issuance of this Part 70 permit, the Permittee shall perform SO₂ testing on **one of the kilns EU-1 and through EU-25** utilizing methods approved by the Commissioner. ~~No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform SO₂ testing on kilns EU-3, EU-4, and EU-5 utilizing methods approved by the Commissioner.~~ These tests are required in order to demonstrate compliance with 326 IAC 7-4.1 and shall be repeated at least once every 2.5 5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.*
- (c) No later than 30 months following the issuance of this Part 70 permit, the Permittee shall perform VOC testing on ~~each~~ **one of kilns (EU-1 through EU-5)** utilizing methods approved by the Commissioner. These tests are required in order to ensure that the requirements of 326 IAC 8-7 do not apply and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing."*

Carmeuse Lime believes that if the above testing is required in addition to the requirements of the CCP it would more than provide appropriate documentation of compliance with the PM₁₀, SO₂ and VOC limitations.

Response to Comment 5:

Pursuant to 326 IAC 2-7-6, each Part 70 permit shall include whatever requirements (including testing) are necessary to ensure continuous compliance. IDEM has documented several opacity violations on the kilns and the IDEM inspector has noted that the status of the baghouses, from a maintenance standpoint, may vary considerable on any given day. In addition, IDEM understands the fiscal burden of testing all five kilns within a short period and consequently dispersed the frequency of required testing over the two and one-half year testing timeframe; as documented in the draft permit. No changes were

made in response to this comment. However, the following changes have been made to clarify that the PM and SO₂ testing for a given kiln must occur in the same time period:

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ and SO₂ testing on kilns EU-1 and EU-3 EU-2 utilizing methods approved by the Commissioner. ~~No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on kilns EU-2, EU-4, and EU-5 utilizing methods approved by the Commissioner.~~ This testing is required in order to demonstrate compliance with 326 IAC 6-1-10.1 and 326 IAC 7-4-1.1. These tests shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) ~~No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform SO₂ testing on kilns EU-1 and EU-2 utilizing methods approved by the Commissioner.~~ No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ and SO₂ testing on kilns EU-3, EU-4, and EU-5 utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and 326 IAC 7-4-1.1 and shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Comment 6:

Carmeuse proposes to determine the limestone fed to the kilns and use the relationship of 2.1 tons of limestone feed per ton of lime for high calcium limestone and 2.27 tons of limestone feed per ton of lime for dolomitic limestone. Carmeuse monitors the quantity of limestone fed to each conveyor using a Merrick belt. Therefore, Carmeuse proposes that Condition D.1.10(a)(2)(A) be changed to the following:

"The weight of lime produced by each kiln shall be determined by the cumulative weight of limestone fed to the kiln using the following relationship:

*One ton of lime is produced for each 2.1 tons of high calcium limestone, and
One ton of lime is produced for each 2.27 tons of dolomitic limestone."*

Response to Comment 6:

The following changes were made in response to this comment:

D.1.9 SO₂ Emissions [326 IAC 7-4-1.1][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4-1.1 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO₂ limits in Condition D.1.3 using one of the following options:

- (a) Mass Balance Calculations and Sampling and Analysis.

...

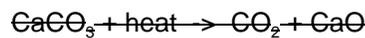
- (2) The Permittee shall calculate the amount of bound sulfur, in pounds per hour, exiting the kiln by performing calculations for weight and sulfur content of the lime and flue dust.

...

- (A) The weight of lime produced by each kiln shall be determined by **either using a lime scale belt or by determining the cumulative weight of limestone fed to the kiln using the following relationships:**

**One (1.0) ton of lime is produced for each two and one-tenth (2.1) tons of high calcium limestone; and
One (1.0) ton of lime is produced for each two and twenty-seven hundredths (2.27) tons of dolomitic limestone.**

~~all lime sales for each month, adjusted for inventory balances. Limestone fed to the kilns shall be determined by the following stoichiometric calculation, using the input values determined from the weighing of lime as described above:~~



~~Where the lb/lbmol value of the limestone changes from 100.09 to 56.08. Therefore, for every pound of lime produced, the amount of limestone used is 1.785 pounds. Multiplying the lime output in pounds by 1.785 pounds will yield the number of pounds of limestone input in pounds.~~

Comment 7:

As discussed in Comment 1, adding any additional monitoring and stack testing, for sources which have underlying regulations specifying monitoring and recordkeeping requirements, is unwarranted and is contrary to the State and Federal Title V regulations. Particulate matter regulations contained in 326 IAC 6-1-10.1 have various requirements for specific sources located in Lake County, including the Carmeuse facility (referred to in the regulations as Marblehead Lime). Certain sources have been required by 326 IAC 6-1-10.1 to install opacity monitors, but the Carmeuse facility is not among them. Certain sources, including the Carmeuse facility, have been required by 326 IAC 6-1-10.1 to prepare and implement Continuous Compliance Plans (CCP) for PM₁₀ emissions. As discussed in the comment on Section D.1.9 - Testing Requirements, there are numerous inspection/monitoring/recordkeeping obligations required by the CCP. In addition, the recently promulgated National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA] contain provisions allowing for monitoring of fabric filter performance using daily EPA Method 9 readings. Carmeuse is not aware of other underlying applicable requirements that specify "per shift" inspections. Therefore, Carmeuse requests that Condition D.1.11 read as follows:

"Opacity/Visible Emissions Observations will be performed as require by the Continuous Compliance Program (CCP) listed in 326 IAC 6-1-10.1(r) or the National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]."

Response to Comment 7:

Visible emissions notations are used to document compliance with 326 IAC 5-1, 326 IAC 6-1, and 40 CFR Part 63 Subpart AAAAA. This requirement is designed: 1) as a trigger for the source to perform some corrective action on the facility if visible emissions are abnormal, and 2) to ensure continuous compliance with the respective emission limitations. IDEM believes that once per shift notations are reasonable, adequate, and necessary to demonstrate continuous compliance with the respective permit requirements. Baghouse failure can occur suddenly and during any shift; therefore, once per shift as opposed to once per day visible emission monitoring can minimize lag time in addressing control failure. 326 IAC 6-1-10.1 does not require continuous compliance certification on an annual basis, whereas the Title V Part 70 program does. IDEM maintains the authority under 326 IAC 2-7-5(3) to require more

stringent monitoring than what is required in 40 CFR Part 63, Subpart AAAAA. Furthermore, Carmeuse has not provided any information that demonstrates that daily visible emission notations will ensure continuous compliance; in fact, Carmeuse's history of non-compliance with respect to opacity further supports IDEM's position that more frequent monitoring is necessary.

No changes were made as a result of this comment.

Comment 8:

Condition D.1.12(a) requires records of pressure drop across the baghouses on a per shift basis. As discussed above, the existing underlying regulations governing the CCP (i.e., 326 IAC 6-1-10.1(r)(1)(c)(i)) require daily inspections of baghouse pressure drop. As discussed in Comment 1, EPA has addressed monitoring requirements in Part 70 permits through several guidance and policy documents and has been clear that Part 70 Permits should not require more frequent monitoring than has already been established in an underlying regulation or applicable requirement such as the CCP. In addition, Carmeuse believes that the daily requirements detailed in the CCP provide a reasonable assurance of compliance. Carmeuse therefore requests that the pressure drop monitoring requirement be changed to a daily frequency as follows:

"The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-1 through EU-5, at least once per ~~shift~~ day when the respective facilities are in operation."

Response to Comment 8:

Pressure drop is an indicator of a variety of conditions within a baghouse. Monitoring of the static pressure drop across a baghouse can alert the operator to relative changes (such as dust cake resistance or bag breaks) over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. Baghouse failure can occur suddenly and during any shift so monitoring can minimize lag time in addressing control failure. Therefore, the IDEM, OAQ believes that the pressure drop readings should be taken at least once per shift. Furthermore, Carmeuse has not provided any information that demonstrates that daily pressure drop readings will ensure continuous compliance; in fact, Carmeuse's history of non-compliance with respect to opacity further supports IDEM's position that more frequent monitoring is necessary.

No changes were made as a result of this comment.

Comment 9:

Carmeuse requests the following changes to clarify or eliminate redundant language (i.e., the monitoring condition specifies a frequency and does not need to be repeated in the recordkeeping condition) for D.1.17(d)(2) and D.1.17(e):

- (d) *To document compliance with Condition D.1.11, the Permittee shall maintain records of:*
 - (1) *All opacity measurements, evaluations, calibration checks, adjustments, and maintenance performed on the continuous monitoring system; or*
 - (2) *The ~~once per shift~~ visible emission notations required by Condition D.1.11.*

- (e) *To document compliance with Condition D.1.12, the Permittee shall maintain records of the ~~once-per-shift~~ total static pressure drop required by Condition D.1.12.*

Response to Comment 9:

The frequency of the required monitoring is restated in the record keeping section to: 1) clarify that timely records must be kept (i.e records must be made at the time of monitoring); and, 2) circumvent the need of the reader to refer to the original condition to determine the monitoring frequency.

No changes were made in response to this comment.

Comment 10:

General Comment Lime Processing Monitoring/Testing Requirements in Section D.2

The requirements to perform visible emissions observations and monitor the pressure drop for the control devices associated with the lime processing, handling, storage and loadout units with "nuisance" dust collectors on a per shift basis is unwarranted and burdensome and should be significantly reduced. It would require more than one and one-half hours (1.5) per shift just to take and record the pressure drop readings. Additional time would be required to perform the visible emission observations. Carmeuse believes that for these types of low emitting sources, periodic stack testing (i.e., once every five years) for a representative number of similar emission units (i.e., approximately 25%) combined with a single, parametric monitoring requirement (e.g., daily visible emissions observations) would constitute adequate periodic monitoring because it occurs on a regular basis and is capable of providing a reasonable assurance of compliance. In addition, Carmeuse will be keeping records of raw material (e.g., limestone and fuel) and product (e.g., lime) throughput. The following discusses the basis for Carmeuse's request.

Carmeuse Lime is not aware of any published EPA or IDEM guidance that would require the imposition of stringent and duplicate monitoring requirements without considering technical feasibility of the monitoring method, economic burden and safety issues imposed on the facility operator and without a direct correlation to predicting, maintaining or documenting compliance. It is agreed that monitoring required by an "applicable requirement" must be included in the Part 70 Operating Permit. However, where no monitoring is specified the permit needs to include only that level and type of "...periodic monitoring specifications sufficient to yield reliable data from the relevant time period that are representative of the source's compliance." The monitoring must assure only that "*reasonable* information is provided" to evaluate compliance (See 326 IAC 2-7-5(3)(A)(ii)). Carmeuse believes that the monitoring requirements proposed by IDEM to be included in the Part 70 Operating Permit are in excess of what is required by the controlling state regulation (as set forth in section 326 IAC 2-7-5(3)(A)(ii)), and go beyond the scope of IDEM's authority.

Further, the monitoring requirements proposed by IDEM to be included in the Part 70 Operating Permit are not mandated by the Clean Air Act, the implementing federal regulations or by any guidance issued by the EPA. EPA's September 15, 1998 "Periodic Monitoring Guidance for Title V Operating Permits Program" was set aside by the D.C. Circuit Court of Appeals as improperly expanding the scope and stringency of what is required as "periodic monitoring." Although set aside, that guidance identifies several criteria to be considered by the permitting authority in evaluating the "appropriate periodic monitoring methodology." When those criteria are applied to the emissions sources and control equipment included in the draft permit, those criteria support the use of stack testing combined with a single, parametric monitoring requirement (e.g., visible emissions notations) as adequate compliance monitoring, without the need for pressure drop readings.

Periodic stack testing of a representative quantity of similar emission units, combined with a single parametric monitoring method, constitutes adequate periodic monitoring because they will occur on a

regular basis and provide a reasonable assurance of compliance. Furthermore, a *per-shift* frequency for these parameters is overly burdensome as well and does not improve the effectiveness of the monitoring program in this particular case. Clearly, the appropriateness of any monitoring parameter and its frequency should be evaluated on a case-by-case basis and Carmeuse believes that for those small particulate matter sources at Carmeuse subject to a periodic monitoring requirement, daily visible emissions notations in conjunction with periodic stack testing is the most appropriate monitoring program. The following should also be considered:

- C The requirements for per shift visible emission notations and pressure drop readings (which must be read manually at the control device) create technical issues, safety concerns and unjustified costs. These issues include the requirement for safe access to and exit from the facility rooftops (during winter months and inclement weather), and the manpower that would be required to take and record hundreds of "observations" during a normal work week for the second shift and (during the summer months) for the third shift. These issues are substantially minimized if the requirement is of daily frequency.
- C The lime processing, handling, storage and loadout operations with "nuisance" dust collectors (which these issues affect) have minimal emissions, little variability and operate as "steady state" operations.
- C Carmeuse is aware of other, issued permits by the State of Indiana (as well as other states) that have no routine monitoring requirements or that have a requirement to conduct visible emissions notations less frequently than per shift and with no or limited pressure drop monitoring requirements for control devices associated with small particulate matter sources. It would appear that these types requirements are adequate to assure the continued proper operation of the particulate matter control devices and should also suffice for the lime processing, handling, storage and loadout operations at Carmeuse.
- C Examples of permits issued by the State of Indiana include: 089-18053-00475 for a small shot blast and coating operation with no routine monitoring requirements; T097-7798-00178 for four coating booths with weekly observation of overspray and monthly observation of roof/stack for overspray emissions; Part 70 No.: T039-7570-00073 Significant Permit Modification No.: 039-12940-00073 for woodworking stack exhaust with daily VE observation and no pressure drop monitoring; and Operation Permit No.: 067-6504-00065, MPM 067-17714-00065 for wet machining operations with daily VE observation and weekly pressure drop monitoring. Examples of permits from other states in USEPA Region V include, for Ohio - Maple Grove Title V Facility ID 03-74-00-0010, effective 2/19/04, with material processing equipment, no monitoring of pressure drop and weekly VE observation of baghouse; Millersville Title V 3-72-00-0081, effective 5/8/2003, material loadout and solid fuel handling with daily VE checks from the emission unit (EU) and baghouse and no pressure drop monitoring; Grand River Title V 02-43-03-0257, effective 5/29/02, lime conveying with daily VE check of baghouse discharge; and for Illinois - South Chicago, ID No. 031600ADY, no requirement to perform VE check or pressure drop readings on nuisance dust collectors.
- C It is Carmeuse's belief that the requirement to obtain pressure drop readings on a per shift basis is extremely burdensome without providing a corresponding increase in the assurance of compliance.

In short, even EPA's Periodic Monitoring guidance would require no more than periodic stack testing combined with daily visible emissions notations (or other suitable parametric monitoring requirement). This combination of monitoring will allow Carmeuse to fully assess and assure compliance with the applicable requirements of the Part 70 operating permit.

Response to Comment 10:

Firstly, IDEM does not consider per shift visible emission and pressure drop monitoring to be infeasible or unreasonable; see Response to Comments 1, 7 and 8 for more information regarding why the specific monitoring requirements are needed, and from where IDEM's authority stems. Secondly, the inclusion of such monitoring requirements is consistent with numerous permits that have been issued by IDEM. The few IDEM approvals that Carmeuse references in support of its request share very little, if any, similarities with the Carmeuse plant in Lake County. None of the approvals listed (compared to Carmeuse's plant): process similar materials, are subject to all of the same emission limitations and standards, and have Carmeuse's historical compliance issues. While the controlled emissions from several units in question are relatively low, those units are either subject to 40 CFR Part 63, Subpart AAAAA and/or are limited to render the requirements of 326 IAC 2-2 not applicable. Thirdly, Carmeuse stated that safety concerns arise from conducting such monitoring, but failed to provide any substantial information in support of its claim.

No changes were made in response to this comment.

Comment 11: D.2.1 - General Provisions Relating to NESHAP

Regarding Condition D.2.1, please change the word "affect" to "affected" as follows:

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) *The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after the effective date of 40 CFR Part 63, Subpart AAAAA.*

Response to Comment 11:

The following change was made as a result of this comment.

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after the effective date of 40 CFR Part 63, Subpart AAAAA.

Comment 12:

As discussed in the comment for Condition D.1.9, Carmeuse requests that testing for PM₁₀ emissions be required on only a representative number of similar/identical units (i.e., approximately 25%). Carmeuse also requests that all units be listed in a single paragraph. As a result, Carmeuse proposes the following changes to Condition D.2.8:

- "(a) *No later than ~~48~~ 24 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on **a representative number of the following sources: the Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Truck Loadout Station (EU-11), Lime Grinder (EU-15), Lime Storage System (EU-14), Lime Handling System #2 (EU-7), and the Truck & Rail Lime Loadout #3 (EU-8)** utilizing methods approved by the Commissioner. **Testing of approximately twenty-five percent of the sources will be considered representative.** These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once*

every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

~~(b) — No later than 36 months following the issuance of this Part 70 permit, the Permittee shall perform PM_{10} testing on the Lime Grinder (EU-15), Lime Storage System (EU-14), Lime Handling System #2 (EU-7), and the Truck & Rail Lime Loadout #3 (EU-8) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing."~~

Response to Comment 12:

Hours of operation, bag life, performed maintenance, and other circumstances contribute to unequal wear on the units and their baghouses. In addition, the various units are subject to different emission limits pursuant to 326 IAC 6-1-10.1. As a result, IDEM believes that the units referenced are not sufficiently identical and therefore could not serve as "representative" for the purposes of testing.

No changes were made as a result of this comment.

Comment 13:

Based upon the discussion in the general comment for Section D.2 of the draft Part 70 permit, Carmeuse requests that Visible Emission (VE) Notations be required on a daily basis and that Condition D.2.9 should be revised as follows:

*"(a) Visible emission notations of the stack exhaust from facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13 and EU-32 shall be performed once per ~~shift~~ **day** during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal."*

Response to Comment 13:

See Response to Comment 7.

Comment 14:

As discussed above, the sources contained in D.2.10(a) are small sources of particulate matter. Well-controlled emissions from these types of sources (i.e., by fabric filters) do not fluctuate substantially. The proposed per shift monitoring of pressure drop is overly burdensome and does not provide any additional assurance of compliance for small sources such as these. Carmeuse believes that daily VE notations in conjunction with periodic stack testing of a representative number of units provides a more than adequate assurance of compliance. Carmeuse requests that Condition D.2.10(a) should be deleted. If it is determined that pressure drop readings are required on a periodic basis, Carmeuse believes that weekly readings would be acceptable and would request the following revision to this section. Note that if the revised Condition D.2.10(a) is retained in the Part 70 permit, EU-32 should be included.

*"The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, ~~and~~ EU-13, **and EU-32**, at least once per ~~shift~~ **week** when the respective facilities are in operation."*

Response to Comment 14:

See Response to Comment 8 regarding pressure drop monitoring frequency. Emission unit EU-32 has been added to the list.

D.2.10 Monitoring for Baghouses

- (a) The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, ~~and~~ EU-13, **and EU-32** at least once per shift when the respective facilities are in operation.

Comment 15:

Carmeuse requests the following changes to clarify or eliminate redundant language (i.e., the monitoring condition specifies a frequency and does not need to be repeated in the recordkeeping condition) for D.2.15(c) and D.2.15(d):

- "(c) To document compliance with Condition D.2.9, the Permittee shall maintain records of the ~~once per shift~~ visible emission notations required by Condition D.2.9.
- (d) To document compliance with Condition D.2.10, the Permittee shall maintain records of the ~~once per shift~~ total static pressure drop required by Condition D.2.10."

Response to Comment 15:

See Response to Comment 9.

Comment 16:

Carmeuse requests that the Fugitive Dust Control Plan (FDCP) not be included in Appendix A of the Part 70 permit. Carmeuse believes that it is appropriate to reference the FDCP, but not to include it, in the Part 70 permit. This would eliminate the need to modify the Part 70 permit whenever the FDCP is updated or amended. As a result, Carmeuse requests to revise Condition D.3.2 as follows:

"Pursuant to 326 IAC 6-1-11.1, compliance with the opacity limits specified in Section C (Fugitive Dust Emissions) of this permit shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP) ~~attached as Appendix A to this permit~~. If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval."

Response to Comment 16:

The public has the legal authority under the Clean Air Act to know if a source is subject to a particular requirement and how the owner or operator of that source chooses to comply with that requirement. The owner or operator is granted a permit shield under 326 IAC 2-7-15 that provides that compliance with the conditions of the permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that the applicable requirements are included and specifically identified in the permit. Therefore, in order to satisfy the requirements of the Part 70 rules and the needs of all of the permit stakeholders, it is necessary to incorporate the requirements of the FDCP with as much detail as is needed to identify the portions of the rule that apply and how the owner or operator will comply with the requirements.

No changes were made as a result of this comment.

Comment 17:

Regarding the Technical Support Document:

Carmeuse requests that any changes in the draft Part 70 Permit be reflected as appropriate in an addendum to the Technical Support Document (TSD).

Carmeuse would like to specifically address the comments in the TSD related to compliance of the kilns with sulfur dioxide related requirements. The relevant section is included below for reference.

As discussed in the comment on Section D.1.3 - Sulfur Dioxide Emissions, Carmeuse is currently in compliance with the relevant sulfur/sulfur dioxide limitations. As noted in the draft Part 70 permit IDEM-OAQ has alleged that the kilns exceeded applicable sulfur/sulfur dioxide limitations based upon stack testing of a single kiln. Additional, follow-up stack testing of the kiln did demonstrate compliance with the subject emission limitations. Subsequent stack testing of kiln EU-5 and other kilns also demonstrated compliance with the sulfur/sulfur dioxide limitations so the Permit Shield otherwise applies to all five kilns. Carmeuse suggests the following language in the "*Enforcement Issues*" section of the document:

Enforcement Issues

- (b) *"The IDEM, OAQ has issued a notice of violation alleging that kilns EU-1 through EU-5 are was out of compliance with 326 IAC 7-4-1.1 and 40 CFR Part 52 Subpart P based upon stack testing of that kiln. Therefore, the Permit Shield provided in Section B of this permit does not apply to those that emission units with regards to the alleged violation of 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P. The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to comply with 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P, and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed and resolved. However, subsequent testing of kiln EU-5 and other kilns demonstrates compliance so the Permit Shield otherwise applies to all five kilns".*
- (c) ***IDEM has alleged opacity exceedances with respect to Several opacity measurements from kilns #5 and #2 (facilities EU-5 and EU-2) in December 2001 and January 2002 and were in violation of 326 IAC 5-1-2. IDEM is reviewing this matter and will take appropriate action. Carmeuse contests these allegations of opacity violation.***

In addition, Carmeuse does not understand statement (e) of the *Enforcement Issues*. Item (e) in the Enforcement Section of the TSD is as follows:

- (e) "The EPA and IDEM are aware that the source has used petroleum coke as fuel for kilns EU-1 through EU-5. The combustion of petroleum coke has resulted in SO₂ emissions in excess of permissible levels. The EPA is reviewing this matter and will take appropriate action."

The company has not received a Notice of Violation or any other information regarding this allegation and requests IDEM to explain its source. Carmeuse cannot make an appropriate comment until it has an understanding of its basis.

Response to Comment 17:

Regarding the Enforcement Issues section of the TSD: Upon further investigation, the IDEM, OAQ acknowledges that: 1) IDEM and the EPA are not pursuing any enforcement actions against the Carmeuse Lime facility in Indiana for the use of petroleum coke in the kilns; 2) Notice of Violation 2002-11228-A (regarding SO₂ emissions) was only in reference to kiln #5; and 3) SO₂ testing on kiln #5,

completed in September 2002, indicates compliance with 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P.

However, no changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Comment 18:

Should IDEM chose to ignore Carmeuse's request to remove the Fugitive Dust Control Plan (FDCP), Carmeuse requests that the FDCP, attached as Appendix A to the permit, be updated to reflect the changes submitted on April 27, 2004. These changes are necessary to update, clarify and specify the provisions of the plan.

Response to Comment 18:

The following changes were made in response to this comment:

(The cover page now contains the date "April 2004" instead of "February 2000" and corrects the address to read "3245 East 103rd Street, Chicago, IL 60617".)

2.0 PERSONNEL RESPONSIBILITIES

2.1 Plant Manager and General Foreman

...

2.1.4 Advise the **Area Operations Manager** ~~Vice President and General Manager of the Central Region, Carmeuse NA~~ of any plan implementation problems, proposed postponement, or proposed modification of plan implementation.

2.2 Supervisory Personnel

...

2.2.3 Advise the Plant Manager or **Production Superintendent** ~~General Foreman~~ of any problems with the fugitive dust operating plan.

3.0 COMPLIANCE DETERMINATION

3.1 The ~~Plant Manager and~~ plant supervisory personnel will review on a daily basis the plant areas **that which** are subject to fugitive dust control needs and/or actions. Comments of daily reviews will be included as necessary on the Daily Treatment Log Sheet.

3.2 Review of record keeping information

3.3 Submit to the Indiana Department of Environmental Management a performance report on a quarterly basis identifying **the dates and number of times** ~~dates~~ when specified control measures were not implemented as required.

4.0 FACILITY DESCRIPTION

Locations of paved and unpaved roads, parking lots, material stockpiles, lime processing, material transfer equipment, kilns, and associated particulate handling equipment are shown in Appendices B-G. The Buffington plant utilizes limestone as a feedstock ~~that which~~ is fired in rotary kilns to produce lime products.

5.0 LOADING or UNLOADING of OPEN STOCKPILES and BULK MATERIALS

...

5.2 Transportation of Bulk Lime and Kiln By-Product

...

Rail cars and trucks are loaded in the loadout areas, which are equipped with telescoping spouts that are lowered over the rail cars and trucks. The spouts are vented to a dust collector ~~that which~~ filters the displaced air/dust from the rail cars and trucks as the material is loaded.

Cleaning of the wheels and bodies of the trucks is the responsibility of each truck operator. It is also the responsibility of the truck operator to maintain the body of the truck in good condition to ensure that material does not leak out during shipment. Truck wheel and body cleaning takes place at the loadout areas **or at hatch closing stations.**

The loadout area housekeeping and maintenance is a designated responsibility of the individual operator for each shift. The plant has a water truck permanently located at the site for use in cleaning plant roadways. ~~The plant supervisor personnel of each department~~ **The plant** will ensure that the housekeeping procedures are followed.

...

5.4.2 Vehicle Traffic Volume

The traffic volume on the plant roadways varies directly with lime production rates.

Approximate vehicular traffic volumes and mileage are estimated as follows:

Material Shipped	Vehicle Type	Number of Vehicle Trips Per Year	Annual Vehicle Miles on Site
Lime	Trucks	23,010	11,505
Flue Dust Envirolime	Trucks	2,640	1,320
-	Plant Vehicles	1,095	1,083
-	Employee Vehicles	24,455	2,987 3,000

5.4.3 Control Action - The active paved roadways will be watered **and/or swept** as needed except as specified in AP-42 on those days when

precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

...

5.5 Unpaved Roads

...

5.5.3 Segment leading to and from the new scale on the southwest side of the plant from the kiln area is approximately two thousand two hundred (2200) feet long and twenty (20) feet wide.

5.5.4 Control Action – The active unpaved roadways will be watered as needed except on those days when precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

5.6 Unpaved Plant Areas

5.6.1 Area Inside the Plant Loop Paved Roadway Segment – The area beneath the kilns is approximately twelve thousand four hundred and ninety three (12,493) square feet.

5.6.2 Area North of Kiln Baghouses – This area is approximately twenty seven thousand (27,000) square feet. The area may be used for the transfer of “pugged” **Envirolime and lime** flue dust. ~~Flue dust~~ **Envirolime or lime** is mixed with water (pugged) and transferred to truck for transport. ~~At this time flue dust has not been pugged for over two years. p~~ Procedures call for pugged flue dust (high moisture content) to be stored in piles until transportation can be obtained

5.6.3 Control Action – ~~t~~**The active unpaved roadways areas** will be watered as needed except as specified in AP-42 on those days when precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

...

5.7 Stockpiles

...

5.7.2 Fuel

The fuel stockpile is generally worked by section with the bulk of the stock **remaining undisturbed**. If conditions warrant, the water truck will be used to minimize fugitive dust generation **in this area**. **The fuel supplied generally has a moisture content of eight percent.**

6.0 CONDITIONS WHICH WILL PREVENT CONTROL MEASURES and PRACTICES from IMPLEMENTATION

All equipment used to implement control measures identified in this plan have replacement components or substitutes ~~that which~~ can be employed **within a reasonable time frame** if ~~equipment failures are experienced~~.

7.0 Fugitive Dust Emissions Observations

Observations will be made on a monthly basis of the following activities:

7.1 The average instantaneous opacity of fugitive particulate emissions from a paved and unpaved roads shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

- (A) The first shall be taken at the time of emission generation.**
- (B) The second shall be taken five (5) seconds later.**
- (C) The third shall be taken five (5) seconds later or ten (10) seconds after the first.**

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

7.2 The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%). The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

7.3 The opacity due to wind erosion from storage piles and exposed areas shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

7.4 The opacity of fugitive particulate emissions from the in-plant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%). Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

- (A) The first shall be taken at the time of emission generation.**
- (B) The second shall be taken five (5) seconds later.**

(C) The third shall be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

7.5 Material transported by truck or rail that is enclosed and covered is considered in compliance with the in-plant transportation requirement of zero (0) percent opacity.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The following revision has been made to clarify that Lake County is a nonattainment area for ozone, not VOC:

A.1 General Information ~~[326 IAC 2-7-4(c)]~~ ~~[326 IAC 2-7-5(15)]~~ ~~[326 IAC 2-7-1(22)]~~

The Permittee owns and operates a stationary lime manufacturing plant.

...

Source Location Status: Nonattainment for PM₁₀, SO₂, and ~~VOC~~ **ozone**
Attainment for all other criteria pollutants

2. The following revisions have been made to clarify that there are no structural steel fabrication activities located at the source:

A.3 Specifically Regulated Insignificant Activities ~~[326 IAC 2-7-1(21)]~~ ~~[326 IAC 2-7-4(c)]~~
~~[326 IAC 2-7-5(15)]~~

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

...

~~(b) Structural and bridge fabrication activities using 80 tons or less of welding consumables.
[326 IAC 6-1-2]~~

(eb) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Assorted covered limestone conveyors; [326 IAC 6-1-2]

(d c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Two (2) boilers with heat input capacities of 0.42 and 0.035 MMBtu per hour. [326 IAC 6-1-2(b)(3)]

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

...

Specifically Regulated Insignificant Activities

...

- (b) ~~Structural steel and bridge fabrication activities using 80 tons or less of welding consumables. [326 IAC 6-1-2]~~
- (e b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Assorted covered limestone conveyors; [326 IAC 6-1-2]
...
- (d c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Two (2) boilers with heat input capacities of 0.42 and 0.035 MMBtu per hour. [326 IAC 6-1-2(b)(3)]

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) Emissions [326 IAC 6-1-2]

- (a) Pursuant to 326 IAC 6-1-2, the PM emissions from EU-22, EU-23, EU-29, EU-30, EU-31, ~~the insignificant structural steel and bridge fabrication activities~~, and the insignificant limestone conveyors, shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

- 3. The following revisions were made to include the effective date and compliance date for 40 CFR Part 63, Subpart AAAAA and remove a redundant sentence:

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affect source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after ~~the effective date of 40 CFR Part 63, Subpart AAAAA.~~ **January 5, 2004.**

D.1.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]

- (a) The affected source, the lime manufacturing plant, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing plants, (40 CFR Part 63, Subpart AAAAA). The affected source must comply with this rule on and after ~~three years following the effective date of the rule.~~ **January 5, 2007.** Pursuant to 40 CFR Part 63, Subpart AAAAA, the Permittee shall comply with the applicable emission limitations for the existing affected lime manufacturing plant, and shall complete all applicable performance tests no later than **January 5, 2007.** ~~three years from the date of publication of the final rule in the Federal Register. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B - Permit Shield, and set out in 326 IAC 2-7-15, does not apply to paragraph (a) of this condition.~~

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affect source except where otherwise specified in Table 8 to 40 CFR Part 63, Subpart AAAAA. The Permittee shall comply with these requirements on and after ~~the effective date of 40 CFR Part 63, Subpart AAAAA.~~ **January 5, 2004.**

D.2.2 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants [40 CFR Part 63, Subpart AAAAA]

- (a) The affected source, the lime manufacturing plant, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing plants, (40 CFR Part 63, Subpart AAAAA). The affected source must comply with this rule on and after ~~three years following the effective date of the rule.~~ **January 5, 2007.** Pursuant to 40 CFR Part 63, Subpart AAAAA, the Permittee shall comply with the applicable emission limitations for the existing affected lime manufacturing plant, and shall complete all applicable performance tests no later than **January 5, 2007.** ~~three years from the date of publication of the final rule in the Federal Register. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B - Permit Shield, and set out in 326 IAC 2-7-15, does not apply to paragraph (a) of this condition.~~

D.1.15 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]

- (a) Pursuant to 40 CFR 63.7130, the Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4) and (5); 63.7(b) and (c); 63.8(e); (f)(4) and (6); and 63.9 (a) through (j) that apply to the affected source and chosen compliance method, by the dates specified. These notifications include but are not limited to the following:

- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than ~~120 days after the effective date of 40 CFR Part 63, Subpart AAAAA.~~ **May 5, 2004.**

D.2.13 National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants - Reporting Requirements [40 CFR Part 63, Subpart AAAAA]

- (a) Pursuant to 40 CFR 63.7130, the Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4) and (5); 63.7(b) and (c); 63.8(e); (f)(4) and (6); and 63.9 (a) through (j) that apply to the affected source and chosen compliance method, by the dates specified. These notifications include but are not limited to the following:

- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than ~~120 days after the effective date of 40 CFR Part 63, Subpart AAAAA.~~ **May 5, 2004.**

D.1.16 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

...

- (b) The significant permit modification application shall be submitted no later than **April 5, 2006.** ~~twenty-seven months after the effective date of 40 CFR Part 63, Subpart AAAAA.~~

D.2.14 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

...

- (b) The significant permit modification application shall be submitted no later than **April 5, 2006**. ~~twenty-seven months after the effective date of 40 CFR Part 63, Subpart AAAAA.~~

4. The following changes have been made to clarify acronyms, correct typographical errors, and clarify requirements pertaining to baghouse inspections.

D.1.9 SO₂ Emissions [326 IAC 7-4-1.1][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4-1.1 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO₂ limits in Condition D.1.3 using one of the following options:

- (a) Mass Balance Calculations and Sampling and Analysis.
- (1) Both limestone and coal are purchased under contract, and each contract contains specifications for sulfur content. Each shipment is sampled and analyzed by an independent laboratory, utilizing **American Society for Testing and Materials (ASTM)** standards for sampling and chemical analyzes. The analysis is provided for each 25,000-ton limestone shipment, and each 10,000-ton coal shipment. Note that each limestone shipment represents approximately five (5) days of feed, and the coal shipment represents approximately 14 days of fuel. ...

D.1.12 Baghouse Inspections [326 IAC 6-1-10.1(r)]

The Permittee shall perform the baghouse inspections pursuant to the Continuous Compliance Plan (CCP) and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter. **Inspections required by this condition shall not be performed in consecutive months.**

D.2.11 Baghouse Inspections [326 IAC 6-1-10.1(r)]

The Permittee shall perform the baghouse inspections pursuant to the CCP and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter. **Inspections required by this condition shall not be performed in consecutive months.**

D.3.4 Particulate Matter (PM)

...

- (e) Wind Erosion from Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the ~~plum~~ **plume** and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

...

- (h) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

- (1) The first will be taken at the time of emission generation.
- (2) The second will be taken five (5) seconds later.
- (3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume ~~approximately~~ and at **approximately** right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

B.11 Emergency Provisions [326 IAC 2-7-16]

....

- (e) IDEM, OAQ, and the Gary DEA, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

D.1.10 SO₂ Emissions [326 IAC 7-4-1.1][326 IAC 3-7][326 IAC 2-7-6]

Pursuant to 326 IAC 7-4-1.1 and 326 IAC 2-7-6, the Permittee shall demonstrate compliance with the SO₂ limits in Condition D.1.3 using one of the following options:

- (a) Mass Balance Calculations and Sampling and Analysis.

....

(eC) Samples shall be composited and analyzed in accordance with ASTM specifications.

- (2) The Permittee shall calculate the amount of bound sulfur, in pounds per hour, exiting the kiln by performing calculations for weight and sulfur content of the lime and flue dust.

....

(eC) The lime and flue dust sample acquisition points shall be at locations where representative samples of the total flow exiting the kilns may be obtained.

D.1.11 Opacity **Monitoring / Visible Emission Monitoring [326 IAC 6-1-10.1(p)]**

....

D.2.5 Lake County PM₁₀ Emission Requirements [326 IAC 6-1-10.1]

- (a) Pursuant to 326 IAC 6-1-10.1, the facilities listed in the chart below shall not exceed the respective PM₁₀ emission limits:

Facility (as listed in 326 IAC 6-1-10.1)	Emission Unit(s) ID	Control Device ID	PM ₁₀ Emission Limits	
			(lbs/ton)	(lbs/hr)
Fluedust Loadout #1	EU-17	CE-10	0.003	0.110
Fluedust Loadout #2	EU-16	CE-9	0.003	0.100
Lime Grinder	EU-15 EU-14	CE-6	0.015	0.44
Lime Handling Baghouse #1	EU-6, EU-24, and EU-28	CE-14	0.002	0.260
Lime Handling Baghouse #2	EU-7	CE-15	0.002	0.180
Lime Handling Baghouse #3	EU-8	CE-13	0.0004	0.050
Lime Handling Baghouse #4	EU-11	CE-25	0.001	0.13
Lime Loadout Baghouse #1	EU-12	CE-7	0.0004	0.050
Lime Loadout Baghouse #2	EU-13	CE-8	0.0004	0.050

D.3.5 Record Keeping Requirements

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements):

- (a) The source shall keep the following documentation to show compliance with each of its control measures and control practices:
 - (2) For each application of water or chemical solution to roadways, the following shall be recorded:
 - (eC) Time of each application
 - (3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:
 - (eC) Application rate

5. The following changes were made to Condition C.18 Emission Statement as a result of changes made to rule 326 IAC 2-6:

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an ~~annual~~ emission statement certified pursuant to the requirements of 326 IAC 2-6. ~~, that must be received by April 15th of each year~~ **This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6.** The ~~annual~~ emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

- (b) ~~The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission This statement must be submitted to:~~

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
Suite 1012, 504 N. Broadway
Gary, Indiana 46402

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (be) The ~~annual~~ emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Gary DEA, on or before the date it is due.

6. Condition D.1.8(a) has been revised to correctly indicate that kiln EU-2, not EU-3, must be tested. Condition D.1.8(b) already requires testing of kiln EU-3.

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ and SO₂ testing on kilns EU-1 and ~~EU-3~~ **EU-2** utilizing methods approved by the Commissioner. This testing is required in order to demonstrate compliance with 326 IAC 6-1-10.1 and 326 IAC 7-4-1.1. These tests shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

7. In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May, 18 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

8. On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Lake County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to A.1 General Information:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary lime manufacturing plant.

Responsible Official:	Vice President, Operations
Source Address:	Clark Road and Lake Michigan - Buffington Station, Gary, Indiana 46402
Mailing Address:	P.O. Box 689 Buffington Station, Gary, Indiana 46402
Source Phone Number:	773-978-5349
SIC Code:	3274
County Location:	Lake
Source Location Status:	Nonattainment for PM ₁₀ , SO ₂ , and ozone under 1-hour and 8-hour standards
Source Status:	Attainment for all other criteria pollutants Part 70 Permit Program Major Source under PSD and ; Emission Offset Rules and Nonattainment NSR 1 of 28 Source Categories Major Source under Section 112 of the Clean Air Act

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Carmeuse Lime Company
Source Location: Clark Road and Lake Michigan - Buffington Station, Gary, IN 46402
County: Lake
SIC Code: 3274
Operation Permit No.: T089-6140-00112
Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Carmeuse Lime Company (“Carmeuse”) relating to the operation of a stationary lime manufacturing plant.

This Part 70 permit contains provisions intended to satisfy the requirements of the construction permit rules.

History

This source was previously known, and is referred to in 326 IAC 6, as “Marblehead Lime Company.”

Emission Units and Pollution Control Equipment

The source consists of the following permitted and un-permitted emission units and pollution control devices; see *Un-permitted Emission Units and Pollution Control Equipment* for a list of un-permitted units:

Lime Production

- (a) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-1; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-1; exhausting to stacks S-1A through S-1F.
- (b) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-2; constructed in 1966; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-2; exhausting to stacks S-2A through S-2F.
- (c) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-3; constructed in 1968; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-3; exhausting to stacks S-3A through S-3F.

- (d) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-4; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-4; exhausting to stacks S-4A through S-4F.
- (e) One (1) coal-fired Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-5; constructed in 1972; a maximum capacity of 8.2 tons of coal per hour, 47.8 tons of limestone per hour, and 23.3 tons of lime per hour; a maximum heat input capacity of 213 MMBtu/hr; emissions controlled by baghouse CE-5; exhausting to stacks S-5A through S-5F.

Lime Processing and Handling

- (f) One (1) Lime Grinder; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (g) One (1) Grinding Mill #1; identified as EU-13; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-8; exhausting to stack S-8.
- (h) One (1) Grinding Mill #2; identified as EU-12; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-7; exhausting to stack S-7.
- (i) One (1) Pugmill #1; identified as EU-18; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-19; exhausting to stacks S-19.
- (j) One (1) Pugmill # 2; identified as EU-19; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-20; exhausting to stack S-20.
- (k) One (1) Lime Handling System #1; identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (l) One (1) Lime Handling System #2; identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15; exhausting to stack S-15.

Lime Storage and Loadout

- (m) One (1) Lime Storage System; identified as EU-24; constructed prior to 1977; consisting of six lime storage tanks; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (n) One (1) Lime Storage System; identified as EU-14; constructed prior to 1977; consisting of eight lime storage tanks; emissions controlled by baghouse CE-6; exhausting to stack S-6.
- (o) One (1) Truck & Rail Lime Loadout #3; identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13; exhausting to stack S-13.

- (p) One (1) Truck Lime Loadout #4; identified as EU-9; constructed in 1994; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-17; exhausting to stack S-17.
- (q) One (1) Truck Flue Dust Loadout #2; identified as EU-16; constructed in 1966; a maximum capacity of 28 tons of dust per hour; emissions controlled by baghouse CE-9; exhausting to stack S-9.
- (r) One (1) Truck Flue Dust Loadout #1; identified as EU-17; constructed in 1966; a maximum capacity of 32 tons of dust per hour; emissions controlled by baghouse CE-10; exhausting to stack S-10.
- (s) One (1) Rail Lime Loadout #2; identified as EU-28; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-14; exhausting to stack S-14.
- (t) One (1) Truck Loadout Station; identified as EU-11; constructed prior to 1977; a maximum capacity of 300 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (u) One (1) Rail Re-Screen Loadout #2; identified as EU-25; constructed in 1996; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25; exhausting to stack S-25.
- (v) One (1) Truck Transfer Station Reclaim Hopper; identified as EU-32; constructed in 1972 and modified in 2003; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-32; exhausting to stack S-32.

Raw material Storage and Handling (Fugitive)

- (w) One (1) Coal Storage Pile; identified as EU-22; a capacity of greater than 3.5 acres; a source of fugitive emissions.
- (x) Two (2) Limestone Storage Piles; identified as EU-23 and EU-29; each a capacity of greater than 9.5 acres; a source of fugitive emissions.
- (y) Coal Unloading and Processing operations; identified as EU-30; consisting of truck and rail unloading and assorted conveyors; a source of fugitive emissions.
- (z) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge unloading and assorted conveyors; a source of fugitive emissions.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted facilities/units:

- (a) One (1) Pugmill #1; identified as EU-18; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-19; exhausting to stacks S-19.
- (b) One (1) Pugmill # 2; identified as EU-19; constructed in 1985; a maximum capacity of 15.14 tons of lime per hour; emissions controlled by baghouse CE-20; exhausting to stack S-20.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Vehicular traffic on paved and unpaved roads, and parking lots with public access. [326 IAC 6-4] [326 IAC 6-1-11.1]
- (b) Structural steel and bridge fabrication activities using 80 tons or less of welding consumables. [326 IAC 6-1-2]
- (c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Assorted covered limestone conveyors; [326 IAC 6-1-2]
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Two (2) boilers with heat input capacities of 0.42 and 0.035 MMBtu per hour. [326 IAC 6-1-2(b)(3)]
- (e) Combustion source flame safety purging on startup.
- (f) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (g) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (h) Refractory storage not requiring air pollution control equipment.
- (I) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) Closed loop heating and cooling systems.
- (k) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: Two (2) gasoline storage tanks, identified as EU-27, each with a maximum capacity of 275 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (l) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: One (1) diesel fuel storage tank, identified as EU-21, with a maximum capacity of 10,000 gallons.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) City of Gary Operating Permits (#01905 through #01919), issued December 8, 1993;
- (b) E 089-3753-00112, issued September 19, 1994;

- (c) CP 089-5851-00112, issued December 9, 1996; and
- (d) AA 089-15427-00112, issued January 25, 2002.

All terms and conditions from previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have revised in this Part 70 permit:

- (a) Conditions 4 and 5 from CP 089-5851-00112, issued December 9, 1996:
The PM emissions from EU-25 shall be limited to 0.027 gr/dscf and 3.2 lb/hr. At a maximum flow rate of 13,980 acfm, this is equivalent to 14 tons of PM per year.

Revised Condition:

Pursuant to CP 089-5851-00112, issued December 9, 1996, the PM/PM10 emissions from EU-25 shall not exceed 3.4 lb/hr and 15 tons per year. Compliance with this limit will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

Reason revised:

The limit has been changed to provide operational flexibility and provide the legally afforded limit of 15 tons per year. Note that compliance with this limit is expected because the controlled PM/PM10 PTE of EU-25 is significantly less than 15 tons per year. See Appendix A for more information.

The following terms and conditions from previous approvals have been determined to be no longer applicable; therefore, the following were not incorporated into this Part 70 permit:

- (a) All construction conditions from all previously issued permits.

Reason not incorporated:

All previously permitted facilities have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issues

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Un-permitted Emission Units and Pollution Control Equipment. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (b) Results from testing completed in August, 2001 indicate that the rotary kilns (facilities EU-1 through EU-5) are in violation of 326 IAC 7-4-1.1(c)(15)(A). The IDEM, OAQ is aware that kilns EU-1 through EU-5 are out of compliance with 326 IAC 7-4-1.1 and 40 CFR Part 52 Subpart P. Therefore, the Permit Shield provided in Section B of this permit does not apply to those emission units with regards to 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P. The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to comply with 326 IAC 7-4-1.1 and 40 CFR Part 52, Subpart P, and a schedule for achieving compliance with such requirements once this issue has been thoroughly reviewed and resolved.
- (c) Several opacity measurements from kiln #5 and #2 (facilities EU-5 and EU-2) were in violation of 326 IAC 5-1-2. IDEM is reviewing this matter and will take appropriate action.

- (d) The source failed to submit the quarterly fugitive dust control plan reports pursuant to 326 IAC 6-1-11.1(e)(4)(G). IDEM is reviewing this matter and will take appropriate action.
- (e) The EPA and IDEM are aware that the source has used petroleum coke as fuel for kilns EU-1 through EU-5. The combustion of petroleum coke has resulted in SO₂ emissions in excess of permissible levels. The EPA is reviewing this matter and will take appropriate action.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on June 17, 1996. Additional information was received on April 5, 1999.

A notice of completeness was not mailed to the source.

Emission Calculations

See Appendix A (pages 1-2) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	greater than 250
VOC	less than 25
CO	greater than 100
NO _x	greater than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Hydrogen Chloride	greater than 25
Miscellaneous HAPs from coal combustion	less than 10 (each)
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀, SO₂, CO, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not reported
PM-10	175
SO ₂	995
VOC	17
CO	427
NO _x	883
HAP (specify)	Not reported

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Rotary Lime Kiln #1 (EU-1)	86.8	43.6 ^(a)	1052 ^(b)	less than 25 ^(c)	153	316	49
Rotary Lime Kiln #2 (EU-2)	86.8	43.6 ^(a)			153	316	49
Rotary Lime Kiln #3 (EU-3)	86.8	43.6 ^(a)			153	316	49
Rotary Lime Kiln #4 (EU-4)	86.8	43.6 ^(a)			153	316	49
Rotary Lime Kiln #5 (EU-5)	86.8	43.6 ^(a)			153	316	49
Lime Grinder (EU-15)	1.93	1.93 ^(a)	0	0	0	0	0
Lime Storage System (EU-14)			0	0	0	0	0
Grinding Mill #2 (EU-12)	0.22	0.22 ^(a)	0	0	0	0	0
Grinding Mill #1 (EU-13)	0.22	0.22 ^(a)	0	0	0	0	0
Pugmill #1 (EU-18)	less than 25 ^{(d)(g)}	less than 25	0	0	0	0	0

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Pugmill #2 (EU-19)			0	0	0	0	0
Lime Handling System #1 (EU-6)	1.14	1.14 ^(a)	0	0	0	0	0
Lime Storage System (EU-24)			0	0	0	0	0
Rail Lime Loadout #2 (EU-28)			0	0	0	0	0
Lime Handling System #2 (EU-7)	0.79	0.79 ^(a)	0	0	0	0	0
Truck and Rail Lime Loadout #3 (EU-8)	0.22	0.22 ^(a)	0	0	0	0	0
Truck Lime Loadout #4 (EU-9)	less than 15 ^(g)	less than 15 ^(e)	0	0	0	0	0
Truck Loadout Station (EU-11)	0.57	0.57 ^(a)	0	0	0	0	0
Rail Re-Screen Loadout #2 (EU-25)	less than 15 ^(g)	less than 15 ^(f)	0	0	0	0	0
Truck Flue Dust Loadout #1 (EU-17)	0.48	0.48 ^(a)	0	0	0	0	0
Truck Flue Dust Loadout #2 (EU-16)	0.44	0.44 ^(a)	0	0	0	0	0
Truck Transfer Station Reclaim Hopper (EU- 32)	0.75 ^(g)	0.75	0	0	0	0	0
Fugitive Emissions	Und.	Und.	0	0	0	0	0
Insignificant Activities	Und.	Und.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Emissions	less than 500	less than 280	1052	less than 25	765	1580	245

Neg. - Negligible; emissions less than 0.01 tons per year.

Und. - Undetermined

Unless otherwise footnoted, the emissions listed in the table above are based on the facility's respective maximum capacity, control efficiency (if applicable), and 8760 hours per year, since no federal or 326 IAC limits are applicable. It is assumed that PM = PM10 for all operations (except for the rotary kilns).

(a) The PM10 emissions from these facilities are limited pursuant to 326 IAC 6-1-10.1. The emissions presented in the table above are based on the respective lb/hr limitations and 8760 hours per year.

(b) Pursuant to 326 IAC 7-4-1.1, the total SO2 emissions from all kilns shall not exceed 240 lb/hr. This is equivalent to 1052 tons of SO2 per year at 8760 hr/yr.

(c) The VOC emissions from each kiln shall not exceed 0.048 lb/ton of lime produced. Compliance with this limit is equivalent to less than 25 tons of VOC per year and will render the requirements of 326 IAC 8-7 not applicable.

(d) The PM emissions from EU-18 and EU-19 shall not exceed 25 tons per year in order to render the requirements of 326 IAC 2-2 not applicable. See the State Rule Applicability section for the specific lb/ton and production limits that will ensure compliance with this limit.

(e) The PM/PM10 emissions from EU-9 shall not exceed 3.4 lb/hr and 15 tons per year in order to render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

(f) Pursuant to CP 089-5851-00112, issued December 9, 1996, the PM/PM10 emissions from EU-25 shall not exceed 3.4 lb/hr and 15 tons per year in order to render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

(g) Pursuant to 326 IAC 6-1-2, particulate matter emissions from these facilities is limited to 0.03 gr/dscf.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	moderate nonattainment
SO ₂	primary nonattainment
NO ₂	attainment
Ozone	severe nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for 326 IAC 2-3 (Emission Offset).
- (b) Lake County has been classified as attainment or unclassifiable or attainment for NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- (c) Lake County has also been classified as nonattainment for PM10 and SO₂. Therefore, these emissions were reviewed pursuant to the requirements of 326 IAC 2-3 (Emission Offset).
- (d) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) The rotary lime kilns (facilities EU-1 through EU-5) are not subject to the requirements of 40 CFR Part 60 Subpart HH and 326 IAC 12 (New Source Performance Standards for Lime Manufacturing Plants) because they were constructed prior to May 3, 1977 and have not been modified since original construction.
- (b) This source is not subject to the requirements of 40 CFR Part 60, Subpart OOO and 326 IAC 12 (New Source Performance Standards for Non-metallic Mineral Processing Plants) because lime is not considered a non-metallic mineral pursuant to 40 CFR 60.671.
- (c) The insignificant diesel fuel and gasoline storage tanks are not subject to the requirements of 40 CFR Part 60, Subparts K, Ka or Kb and 326 IAC 12 (New Source

Performance Standards) because the each tank has a capacity less than 40 m³ (less than 10,566 gallons).

- (d) The insignificant boilers are not subject to the requirements of 40 CFR Part 60, Subparts D, Da, Db, or Dc (New Source Performance Standards (NSPS)) because each boiler has a heat input capacity less than 10 MMBtu/hr.
- (e) This source is subject to the requirements of 40 CFR Part 63, Subpart AAAAA (National Emission Standards for Hazardous Air Pollutants from Lime Manufacturing Plants) because the source is a lime manufacturing plant pursuant to 40 CFR 63.7081 that is a major source of HAPs. A copy of the MACT is currently available on the U.S. EPA website, <http://www.epa.gov/ttn/atw/lime/limepg.html>.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source described in this section except when otherwise specified in 40 CFR Part 63, Subpart AAAAA.

This rule has a future compliance date; therefore, the specific details of the rule and how the Permittee will demonstrate compliance are not provided in the permit. The Permittee shall submit:

- (1) An application for a significant permit modification no later than 27 months following the effective date of 40 CFR Part 63, AAAAA. The application shall specify the option or options for the emission limitations and standards and methods for determining compliance chosen by the Permittee. At that time, IDEM, OAQ will include the specific details of the rule and how the Permittee will demonstrate compliance.
- (2) All applicable notifications pursuant to 40 CFR 63.9(b)(2) and 40 CFR Part 63.7130.
- (f) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.
- (g) This source is not subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring. In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant: 1) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and 3) the unit has the potential to emit, of the applicable regulated air pollutant, equal or greater than 100 percent of the amount required for a source to be classified as a major source.

The rotary lime kilns (EU-1 through EU-5) and associated operations are not subject to the requirements of 40 CFR Part 64 because, pursuant to 40 CFR 64.2(b)(1), any facility subject to the requirements 40 CFR Part 63 (proposed after November 15, 1990) is exempt from 40 CFR Part 64. The rotary kilns and associated operations that satisfy the CAM applicability criteria listed above are subject to the requirements of 40 CFR Part 63 Subpart AAAAA.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset)

This source was originally constructed in the 1960s and was an existing PSD and EO major source upon promulgation of 326 IAC 2-2 and 326 IAC 2-3, respectively. Note that the source belongs to 1 of the 28 PSD source categories with a 100 ton per year threshold.

Carmeuse constructed pugmills EU-18 and EU-19 in 1985; however, it did not receive prior approval. In order to render the requirements of 326 IAC 2-2 not applicable, the following limitations have been placed on pugmills EU-18 and EU-19:

- (a) The PM emissions from pugmill EU-18 shall not exceed 0.186 pound per ton of lime processed.
- (b) The PM emissions from pugmill EU-19 shall not exceed 0.186 pound per ton of lime processed.
- (c) The total lime processed by both pugmills EU-18 and EU-19 (combined) shall not exceed 268,000 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with these limits is equivalent to PM emissions of less than 25 tons per year and will render the requirements of 326 IAC 2-2 not applicable.

Based on the emission calculations provided in Appendix A, the PM emissions from pugmills EU-18 and EU-19 have never exceeded this limit.

(Note that PM10 was not regulated until 1987.)

On September 19, 1994, Carmeuse was issued E 089-3753-00112 to permit the construction and operation of Truck Lime Loadout #4 (EU-9). The PM/PM10 emissions from Truck Lime Loadout #4 (EU-9) shall not exceed 3.4 pounds per hour and 15 tons per year. Compliance with this limit will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

On December 9, 1996, Carmeuse was issued CP 089-5851-00112 to permit the construction and operation of Re-Screen Loadout #2 (EU-25). Pursuant to CP 089-5851-00112, issued December 9, 1996, and as revised by this permit, the PM/PM10 emissions from Re-Screen Loadout #2 (EU-25) shall not exceed 3.4 pounds per hour and 15 tons per year. Compliance with this limit will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

In the spring of 2003, Carmeuse modified an existing truck unloading operation (EU-32) by moving it to different location at the plant, adding an enclosure, and installing a dust collector. The modification was completed to increase the efficiency of lime transfer and decrease fugitive emissions. Prior to the modification, EU-32 was a source of uncontrolled fugitive emissions that resulted from the unloading of lime onto uncovered conveyors located outdoors. Following completion of the modification, trucks transfer the lime to underground conveyors through a discharge hopper (located at ground level). Emissions from the bulk transfer are controlled by a dust collector. As a result, the modification resulted in an emissions decrease and is not subject to the requirements of 326 IAC 2-2.

326 IAC 2-4.1 (Hazardous Air Pollutants)

The source is not subject to the requirements of 326 IAC 2-4.1 because none of its facilities were constructed after July 27, 1997 and are a major source of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in Lake County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15th of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this

permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements)

This source is subject to the rule because it is specifically listed in 326 IAC 6-1-10.1.

Pursuant to 326 IAC 6-1-10.1, the Permittee shall implement the maintenance and inspection practices outlined in the Continuous Compliance Plan (CCP), dated March 1997. The CCP includes, but is not limited to, requirements to monitor operating parameters of the baghouses, such as pressure drop and temperature, monitor operating parameters of the kilns, such as fan speed and current, and to perform inspections of the baghouses.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

The source is subject to the requirements of 326 IAC 6-1-11.1 because the source is located in Lake County and it has the potential to emit fugitive particulate matter emissions greater than five (5) tons per year.

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall comply with these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP) attached as Appendix A to the permit.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

This source is subject to the requirements of 326 IAC 6-1.11-2 because the source has a potential to emit PM₁₀ greater than ten (10) tons per year and is located in Lake County.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Limitations)

The source is not subject to the requirements of 326 IAC 6-5 because it is not located in an area listed in 326 IAC 6-5-1(a), and does not contain any facilities with the potential to emit fugitive PM greater than 25 tons per year which received a preconstruction approval after December 13, 1985.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is not subject to the requirements of 326 IAC 8-6 because it has the potential to emit less than 100 tons of VOC per year.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO and commenced operation after March 21, 1972. However, under this rule, there are no specific CO emission limitations because the source is not an operation listed under 326 IAC 9-1-2.

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Matter)

Rotary Kilns (EU-1 through EU-5), Lime Handling System #1 (EU-6), Lime Handling System #2 (EU-7), Truck & Rail Lime Loadout #3 (EU-8), Truck Loadout Station (EU-11), Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Storage System (EU-14), Lime Grinder (EU-15), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), Lime Storage System (EU-24), and Rail Lime Loadout #2 (EU-28) are not subject to the requirements of 326 IAC 6-1-2 because they are subject to the requirements of 326 IAC 6-1-10.1.

Facilities Truck Lime Loadout #4 (EU-9), Pugmill #1 (EU-18), Pugmill #2 (EU-19), Rail Re-Screen Loadout #2 (EU-25), Coal Storage Pile (EU-22), Limestone Storage Pile (EU-23), Limestone Storage Pile (EU-29), Coal Unloading and Processing operations (EU-30), and Limestone Unloading and Processing operations (EU-31) are subject to the requirements of 326 IAC 6-1-2 because the source has the potential to emit PM greater than 100 tons per year, the source is located in Lake County, and each facility is not specifically listed in 326 IAC 6-1-10.1.

Pursuant to 326 IAC 6-1-2, the particulate matter emissions from EU-9, EU-18, EU-19, EU-25, and EU-32 shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements)

Pursuant to 326 IAC 6-1-10.1, the facilities listed in the chart below shall not exceed the respective PM₁₀ emission limits:

Facility (as listed in 326 IAC 6-1-10.1)	Emission Unit(s) ID	Control Device ID	PM ₁₀ Emission Limits	
			(lbs/ton)	(lbs/hr)
Rotary Kiln #1	EU-1	CE-1	0.478	9.950
Rotary Kiln #2	EU-2	CE-2	0.478	9.950
Rotary Kiln #3	EU-3	CE-3	0.478	9.950
Rotary Kiln #4	EU-4	CE-4	0.478	9.950
Rotary Kiln #5	EU-5	CE-5	0.478	9.950
Fluedust Loadout #1	EU-17	CE-10	0.003	0.110
Fluedust Loadout #2	EU-16	CE-9	0.003	0.100
Lime Grinder	EU-15 EU-14	CE-6	0.015	0.44
Lime Handling Baghouse #1	EU-6, EU-24, and EU-28	CE-14	0.002	0.260
Lime Handling Baghouse #2	EU-7	CE-15	0.002	0.180
Lime Handling baghouse #3	EU-8	CE-13	0.0004	0.050
Lime Handling baghouse #4	EU-11	CE-25	0.001	0.13
Lime Loadout Baghouse #1	EU-12	CE-7	0.0004	0.050
Lime Loadout Baghouse #2	EU-13	CE-8	0.0004	0.050

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

None of the facilities located at this source are subject to the requirements of 326 IAC 6-3-2 because they are subject to the requirements of 326 IAC 6-1.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Rotary Kilns EU-1 through EU-5 are not subject to the requirements of 326 IAC 7-1.1 because they are subject to 326 IAC 7-4-1.1.

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

Rotary Kilns EU-1 through EU-5 are subject to the requirements of 326 IAC 7-4-1.1 because they are specifically listed in the rule.

IDEM is currently drafting revisions to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations).

Under the rule revision, the specific requirements pertaining to kilns EU-1 through EU-5 will change. As of the date this permit is being issued, those revisions have not been approved by the EPA into the Indiana State Implementation Plan (SIP) (40 CFR Part 52, Subpart P); therefore, the requirements from the previous version of 326 IAC 7-4-1.1, which has been approved into the SIP, will remain as the applicable requirement until the revisions to 326 IAC 7-4-1.1 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR Part 52, Subpart P:

- (a) The total sulfur dioxide (SO₂) emissions from the rotary kilns (EU-1 through EU-5) shall not exceed 240 pounds per hour.

- (b) The SO₂ emissions from any one kiln (EU-1 through EU-5) shall not exceed 80 pounds per hour.
- (c) The SO₂ emissions shall be vented from the kilns/kiln gas filter systems at the following heights above grade:

Kiln Number	Stack Height (feet)
EU-1	80
EU-2	87
EU-3	87
EU-4	95
EU-5	89

Pursuant to 326 IAC 7-4-1.1(c)(15) of the revised rule, kilns EU-1 through EU-5 must comply with more stringent emission and stack height requirements.

See the *Enforcement Issues* section of this document for more information regarding the compliance status of facilities EU-1 through EU-5 with respect to 326 IAC 7-4-1.1.

326 IAC 8-7 (Specific VOC Reduction Requirements)

The total amount of lime produced from rotary kilns EU-1 through EU-5 shall not exceed 999,990 tons per twelve consecutive month period with compliance determined at the end of each month. The VOC emissions from each kiln shall not exceed 0.05 pounds per ton of lime produced. Compliance with these limits is equivalent to source-wide VOC emissions of less than 25 tons per year and will render the requirements of 326 IAC 8-7 not applicable.

These limits are based on the 0.05 lb VOC per ton AP-42 emission factor for coal-fired rotary lime kilns.

State Rule Applicability - Specifically Regulated Insignificant Activities

326 IAC 6-1-2 (Particulate Matter)

Pursuant to 326 IAC 6-1-2(b)(3), the PM emissions from each of the insignificant boilers shall not exceed 0.01 gr/dscf.

Pursuant to 326 IAC 6-1-2, the PM emissions from the insignificant structural steel fabrication activities and insignificant conveyors shall not exceed 0.03 gr/dscf.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) do not apply to the insignificant gasoline or diesel storage tanks because they each have a capacity of less than 39,000 gallons.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

The requirements of 326 IAC 8-4-6 (Gasoline Dispensing Facilities) do not apply to the insignificant gasoline dispensing unit because it was constructed prior to July 1, 1989 and has a monthly throughput of less than 10,000 gallons.

Testing Requirements

- (a) Based on the potential emission calculations provided in Appendix A, the emissions from kilns EU-1 through EU-5 could potentially exceed the hourly 326 IAC 6-1-10.1 limits. Therefore the following testing is required:

No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on kilns EU-1 and EU-3 utilizing methods approved by the Commissioner. No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on kilns EU-2, EU-4, and EU-5 utilizing methods approved by the Commissioner. This testing is required in order to demonstrate compliance with 326 IAC 6-1-10.1. These tests shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) In order to demonstrate compliance with 326 IAC 7-4.1:

No later than 12 months following the issuance of this Part 70 permit, the Permittee shall perform SO₂ testing on kilns EU-1 and EU-2 utilizing methods approved by the Commissioner. No later than 30 months after the issuance of this Part 70 permit, the Permittee shall perform SO₂ testing on kilns EU-3, EU-4, and EU-5 utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 7-4.1 and shall be repeated at least once every 2.5 years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (c) In order to render the requirements of 326 IAC 8-7 not applicable:

No later than 30 months following the issuance of this Part 70 permit, the Permittee shall perform VOC testing on each kiln (EU-1 through EU-5) utilizing methods approved by the Commissioner. These tests are required in order to ensure that the requirements of 326 IAC 8-7 do not apply and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (d) Based on the potential emission calculations provided in Appendix A, the emissions from Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Truck Loadout Station (EU-11) could potentially exceed the applicable 326 IAC 6-1-10.1 limits. Therefore the following testing is required:

No later than 18 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on the Grinding Mill #2 (EU-12), Grinding Mill #1 (EU-13), Lime Handling System #1 (EU-6), Lime Storage System (EU-24), Rail Lime Loadout #2 (EU-28), Truck Flue Dust Loadout #2 (EU-16), Truck Flue Dust Loadout #1 (EU-17), and the Truck Loadout Station (EU-11) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

- (e) No later than 36 months following the issuance of this Part 70 permit, the Permittee shall perform PM₁₀ testing on the Lime Grinder (EU-15), Lime Storage System (EU-14), Lime Handling System #2 (EU-7), and the Truck & Rail Lime Loadout #3 (EU-8) utilizing methods approved by the Commissioner. These tests are required in order to demonstrate compliance with 326 IAC 6-1-10.1 and shall be repeated at least once every five years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The rotary kilns (facilities EU-1 through EU-5) have applicable compliance monitoring conditions as specified below:
 - (a) Pursuant to 326 IAC 6-1-10.1(p), the Permittee shall monitor the opacity of the exhaust from stacks S-1 through S-5 (exhausting emissions from kilns EU-1 through EU-5) during normal operation through self monitoring of opacity (visible emission notations). The opacity monitoring tests shall be performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. These tests shall be performed once per shift during normal daylight operations. Readings shall be taken for a minimum of thirty (30) minutes during each shift. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the opacity readings are greater than seventy-five percent (75%) of the applicable standard. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit. If the Method 9 tests can not be performed due to the position of the sun, inclement weather, etc., then the Permittee shall perform visible emission notations of the exhaust from stacks S-1 through S-5 once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
 - (b) The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-1 through EU-5, at least once per shift when the respective facilities are in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the last stack test or as indicated in the

Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (c) The Permittee shall perform the baghouse inspections pursuant to the CCP and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-1-10.1.

- 2. Facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13 and EU-32 have applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the stack exhaust from facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13, and EU-32 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
 - (b) The Permittee shall record the total static pressure drop across the baghouses, used in conjunction with facilities EU-9, EU-18, EU-19, EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13, and EU-32 at least once per shift when the respective facilities are in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the last stack test or as indicated in the Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (c) The Permittee shall perform the baghouse inspections pursuant to the CCP and 326 IAC 6-1-10.1(r)(1)(c). The inspections shall be performed at least once per calendar quarter.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-1-10.1 and 326 IAC 6-1-2, and render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

Conclusion

The operation of this lime manufacturing plant shall be subject to the conditions of the attached Part 70 Permit No. T089-6140-00112.

**REVISED DUST CONTROL PLAN FOR
FUGITIVE PARTICULATE MATTER**

**CARMEUSE LIME, INC.
BUFFINGTON PLANT
GARY, INDIANA 46402-1689**

April 2004

**CARMEUSE LIME, INC.
3245 East 103rd Street
Chicago, IL 60617**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 IMPLEMENTATION	4
2.0 PERSONNEL RESPONSIBILITIES	4
3.0 COMPLIANCE DETERMINATION	5
4.0 FACILITY DESCRIPTION	5
5.0 LOADING or UNLOADING of OPEN STOCKPILES of BULK MATERIALS	6
5.1 Transportation of Bulk Materials	6
5.2 Transportation of Bulk Products	7
5.3 Outdoor Conveying	8
5.4 Paved Roadways and Parking Areas	8
5.5 Unpaved Roadways	10
5.6 Unpaved Plant Areas	11
5.7 Stockpiles	11
6.0 CONDITIONS WHICH WILL PREVENT CONTROL MEASURES and PRACTICES from IMPLEMENTATION	11
7.0 FUGITIVE DUST EMISSIONS OBSERVATIONS	11

APPENDICES

- A DAILY TREATMENT LOG
- B FUGITIVE DUST OPERATING PROGRAM MAP **
- C PLOT PLAN, PROPERTY LINES, and ACCESS ROADS **
- D BUFFINGTON PLANT FLOW DIAGRAM (KILNS 1-5) **
- E PRODUCT HANDLING SYSTEM FLOW DIAGRAM **
- F MATERIAL HANDLING SYSTEM FLOW DIAGRAM **
- G GRINDING MILL SYSTEM FLOW DIAGRAM **

** Not attached; Available at source.

**FUGITIVE DUST OPERATING PLAN
CARMEUSE LIME, INC.
BUFFINGTON PLANT**

1.0 IMPLEMENTATION

- 1.1 All procedures described in this document will be implemented as defined within 326 IAC 6-1-11.1. Any circumstances delaying or modifying the application of any part of the program will require notification of the appropriate individuals listed under the personnel responsibilities.
- 1.2 The enclosed **Daily Treatment Log** (*See Appendix A*) will be completed under the supervision of the General Foreman.

2.0 PERSONNEL RESPONSIBILITIES

- 2.1 Plant Manager and General Foreman
 - 2.1.1 Ensure that supervisory personnel understand the plan procedures and that implementation is performed in a timely fashion.
 - 2.1.2 Review the daily record keeping forms to ensure the plant procedures are being performed as required
 - 2.1.3 When traveling throughout the plant, note whether the plant procedures have been implemented, and their effectiveness towards the control of fugitive emissions.
 - 2.1.4 Advise the Area Operations Manager of any plan implementation problems, proposed postponement, or proposed modification of plan implementation.
- 2.2 Supervisory Personnel
 - 2.2.1 Department supervisors, shift supervisors, and foremen will select and instruct the appropriate personnel who will implement the plan procedures.
 - 2.2.2 Review the daily record keeping forms prior to forwarding to the Plant Manager.

2.2.3 Advise the Plant Manager or Production Superintendent of any problems with the fugitive dust operating plan.

2.3 Plant Personnel

2.3.1 Will perform the appropriate assigned activity as required by the plan procedures.

2.3.2 Will complete the record keeping forms with the appropriate information upon completion of any plan procedure.

2.3.3 Will notify supervisory personnel of any fugitive dust emissions in the plant that require attention.

2.3.4 Will notify supervisory personnel of the control effectiveness or lack therein of plan procedures.

3.0 COMPLIANCE DETERMINATION

3.1 The plant supervisory personnel will review on a daily basis the plant areas that are subject to fugitive dust control needs and/or actions. Comments of daily reviews will be included as necessary on the Daily Treatment Log Sheet.

3.2 Review of record keeping information

3.3 Submit to the Indiana Department of Environmental Management a performance report on a quarterly basis identifying the dates and the number of times when specified control measures were not implemented as required

4.0 FACILITY DESCRIPTION

Locations of paved and unpaved roads, parking lots, material stockpiles, lime processing, material transfer equipment, kilns, and associated particulate handling equipment are shown in Appendices B-G. The Buffington plant utilizes limestone as a feedstock which is fired in rotary kilns to produce lime products.

5.0 LOADING or UNLOADING of OPEN STOCKPILES and BULK MATERIALS

5.1 Transportation of Bulk Materials

5.1.1 Limestone

Limestone is crushed, sized, and washed prior to shipment to the Buffington plant. Consequently, the amount of material less than 200 mesh (silt content) is less than 1%. This factor, in addition to the material containing approximately 3% moisture as received, helps eliminate fugitive emissions from occurring during bulk material transfer operations.

The limestone is shipped to the Buffington plant by lake boats. The lake boats are unloaded using adjustable height conveyors to minimize the drop distance of the stone thereby minimizing fugitive dust emissions. Moisture content causes aggregation of the less than 200 mesh material to the surface of the larger particles.

Any significant rainfall soaks the interior of the limestone stockpiles and drying is a very slow process. Conveyors and front-end loaders are used for both the loading and unloading of limestone from the stockpiles. Approximate annual throughput for the stockpiles is 1,800,000 tons.

5.1.2 Fuel

Fuel is received by truck and unloaded directly to the stockpile or to the below-grade hopper. A front-end loader moves the fuel to the aforementioned below-grade hopper.

The fuel silt content is approximately 5% by weight. This factor, in addition to the fuel having moisture content of approximately 9.5% as received, helps eliminate fugitive emissions from occurring during fuel transfer operations.

Any significant rainfall soaks the interior of the fuel stockpiles and drying is a very slow process. Approximate annual throughput for the stockpiles is 250,000 tons.

5.2 Transportation of Bulk Lime and Kiln By-Product

Both these materials are transported from the facility in haul trucks and rail cars which are not the property of Carmeuse Lime, Inc.. Open bed trucks are required to be equipped with tarpaulins which cover the bed of the truck. Covering of the bed of the truck is performed by the respective truck operator prior to exiting the plant.

In addition to the open bodied haul trucks and rail cars, blower type trucks are used to haul lime and kiln by-product from the Buffington plant. Since these truck types are completely enclosed no tarpaulin covers are required.

Rail cars and trucks are loaded in the loadout areas, which are equipped with telescoping spouts that are lowered over the rail cars and trucks. The spouts are vented to a dust collector that filters the displaced air/dust from the rail cars and trucks as the material is loaded.

Cleaning of the wheels and bodies of the trucks is the responsibility of each truck operator. It is also the responsibility of the truck operator to maintain the body of the truck in good condition to ensure that material does not leak out during shipment. Truck wheel and body cleaning takes place at the loadout areas or at hatch stations.

The loadout area housekeeping and maintenance is a designated responsibility of the individual operator for each shift. The plant has a water truck permanently located at the site for use in cleaning plant roadways. The plant supervisor will ensure that the housekeeping procedures are followed.

The plant speed limit is 8 mph and it is strictly enforced as both a safety and fugitive dust control.

5.3 Outdoor Conveying

Material flow diagrams identifying existing control equipment for all processing lines are shown in Appendices D, E, F, and G.

5.3.1 Limestone

Limestone is transferred by either gravimetric feed or front-end loader to a below-grade hopper. The hopper feeds a covered conveyor system which transfers the limestone to enclosed storage silos. The moisture content of the limestone makes venting of the conveyor transfer points unnecessary.

5.3.2 Lime

Transfer of lime product is by covered conveyor systems. Conveyor transfer points control particulate fugitive emissions via dust collectors.

5.3.3 Material Collected by Kiln Baghouses

Materials from Kilns No. 1, 2, and 3 are pneumatically conveyed to an enclosed storage bin. Materials from Kilns No. 4 and 5 are transferred by enclosed screw conveyors and enclosed bucket elevators to an enclosed storage bin. Storage bins are equipped with dust collectors.

5.3.4 Fuel

Fuel is transferred by either gravimetric feed or front-end loader to a below-grade hopper. The hopper feeds a covered conveyor system which transfers the fuel to an enclosed storage silo. The moisture content of the fuel makes venting of the conveyor transfer points unnecessary.

5.4 Paved Roads and Parking Areas

Primary roadways and parking areas at the Buffington plant are paved.

The primary roadway and parking areas that are used by vehicles traveling in the plant are indicated on the enclosed plant drawing 83BF01 (See Appendix B).

5.4.1 Listing of Roadway Segments (All distances are approximate)

- 5.4.1.1 Plant Entry Segment – Seven hundred ninety (790) feet long and thirty (30) feet wide. Distance is from the entry onto plant property to the junction of the plant loop road.
- 5.4.1.2 Plant Loop Segment – One thousand seven hundred forty (1,740) feet long and twenty-five (25) feet wide. Includes the roadway route under the west product loadout area.
- 5.4.1.3 Under Kiln Segment – Two hundred fifty (250) feet long and twenty-five (25) feet wide.
- 5.4.1.4 Employee Parking Entry Road and Parking Lot Segment – Two hundred fifty five (255) feet long and twenty feet wide. The parking lot is three

hundred ninety (390) feet long and two hundred seventy (270) feet wide.

5.4.1.5 Service Building Parking Lot Segment – One hundred seventy (170) feet long and forty two (42) feet wide.

5.4.1.6 East Product Loadout Segment – Four hundred eighty (480) feet long and twenty (20) feet wide.

5.4.1.7 Center Bay Loadout Segment – One hundred twenty (120) feet long and twenty (20) feet wide.

5.4.2 Vehicle Traffic Volume

The traffic volume on the plant roadways varies directly with lime production rates.

Approximate vehicular traffic volumes and mileage are estimated as follows:

Material Shipped	Vehicle Type	Number of Vehicle Trips per Year	Annual Vehicle Miles on Site
Lime	Trucks	23,010	11,505
Envirolime	Trucks	2,640	1,320
-	Plant Vehicles	1095	1,083
-	Employee Vehicles	24,455	3,000

5.4.3 Control Action -The active paved roadways will be watered and/or swept as needed except as specified in AP-42 on those days when precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

5.5 Unpaved Roads

5.5.1 Segment to Dockside Limestone Unload Location – This unpaved roadway is approximately one thousand four hundred (1,400) feet long and twenty (20) feet wide. The

road is typically used once a day by a front-end loader traveling to the stockpile area. Occasionally, a plant pick-up truck will use the roadway.

5.5.2 Segment around limestone storage area – This unpaved roadway is approximately eight hundred forty (840) feet long and twenty (20) feet wide. Roadway length and activity fluctuates significantly with season. Use of this roadway is the same as that of the Dockside Limestone Unload Location.

5.5.3 Segment leading to and from the new scale on the southwest side of the plant from the kiln area is approximately two thousand two hundred (2200) feet long and twenty (20) feet wide.

5.5.4 Control Action – The active unpaved roadways will be watered as needed except on those days when precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

5.6 Unpaved Plant Areas

5.6.1 Area Inside the Plant Loop Paved Roadway Segment – The area beneath the kilns is approximately twelve thousand four hundred and ninety three (12,493) square feet.

5.6.2 Area North of Kiln Baghouses – This area is approximately twenty seven thousand (27,000) square feet. The area may be used for the transfer of “pugged” Envirolime and lime. Envirolime or lime is mixed with water (pugged) and transferred to truck for transport. Procedures call for pugged flue dust (high moisture content) to be stored in piles until transportation can be obtained

5.6.3 Control Action – The active unpaved areas will be watered as needed except as specified in AP-42 on those days when precipitation exceeds 0.1 inch, or on those days when freezing conditions could create a safety hazard.

5.7 Stockpiles

5.7.1 Limestone

The limestone stockpiles are worked by section, with the bulk of the stock remaining undisturbed. Unloading

operations from the lake boats to the dock area occur on an average of once per week for 8 hours each delivery during the months of April through December.

The limestone typically retains a moisture content of approximately 3%. This moisture content effectively controls fugitive emissions from the stockpile.

The limestone stockpile is not treated with chemical surfactants for quality control reasons. High purity, very low contaminant, lime products are required by our customers.

The front-end loader used to work the stockpiles does not generate significant fugitive emissions due to the moisture content of the limestone. If conditions warrant, the water truck will be used to minimize fugitive dust generation.

5.7.2 Fuel

The fuel stockpile is generally worked by section with the bulk of the stock remaining undisturbed. If conditions warrant, the water truck will be used to minimize fugitive dust generation in this area. The fuel supplied generally has a moisture content of eight percent.

6.0 CONDITIONS WHICH WILL PREVENT CONTROL MEASURES and PRACTICES from IMPLEMENTATION

All equipment used to implement control measures identified in this plan have replacement components or substitutes that can be employed within a reasonable time frame.

7.0 FUGITIVE DUST EMISSIONS OBSERVATIONS

Observations will be made on a monthly basis of the following activities:

- 7.1 The average instantaneous opacity of fugitive particulate emissions from a paved and unpaved roads shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

- (A) The first shall be taken at the time of emission generation.

- (B) The second shall be taken five (5) seconds later.
- (C) The third shall be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

- 7.2 The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%). The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
- 7.3 The opacity due to wind erosion from storage piles and exposed areas shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- 7.4 The opacity of fugitive particulate emissions from the in-plant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%). Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:
 - (A) The first shall be taken at the time of emission generation.
 - (B) The second shall be taken five (5) seconds later.
 - (C) The third shall be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

- 7.5 Material transported by truck or rail that is enclosed and covered is considered in compliance with the in-plant transportation requirement of zero (0) percent opacity.

Appendix A
DAILY TREATMENT LOG

Item / Day of Week	SUN	MON	TUE	WED	THU	FRI	SAT	Comments
Date (XX/XX/XX):								
# of Gallons Applied:								
Application Rate (1):								
Method of Application (2):								
Treatment Area - Paved Roads								
Plant Entry Segment								
Plant Loop Segment								
Under Kilns Segment								
Employee Parking Segment								
Service Building Lot Segment								
East Product Loadout Segment								
Center Bay Loadout Area								
West Loadout Area								
Treatment Area - Unpaved Roads								
Segment to Dockside Limestone Pile								
Segment Around East Limestone Pile								
Treatment Area - Other Unpaved Roads								
Area Inside Plant Loop Paved Roadway								
Area North of Kiln Baghouses								
Railroad Tracks								
Other								
Weather Conditions								
C = Clear; S = Snow; R = Rain; L = Sleet/Hail; O = Overcast								
Wind Speed (mph)								
Wind Direction								
Temperature (deg F)								

(1) Application Rate: H = Heavy, M = Medium; L = Light;

(2) Method of Application: W = Water Truck, N = Not Necessary (wet/snow cover), U = Operator Unavailable

**Appendix A: Emissions Calculations
Emissions from coal-fired Lime Kilns**

**Company Name: Carmeuse Lime Company
Address City IN Zip: Buffington Station, Gary, IN 46402
Permit Number: T 089-6140-00112
Reviewer: ERG/BS
Date: 12/1/2003**

Lime Production Capacity (1 kiln) (ton/hr)	Coal Input Capacity (ton coal/hr)	Heat Input Capacity (MMBtu/hr)
23.3	8.2	213.2

Criteria Pollutants	PM	PM10	SO2	NOx	VOC	CO
Emission Factor (lb/ton lime produced) ^(a)	350.0	42.0	5.4	3.1	0.05	1.5
Uncontrolled PTE (ton/yr)	35,718.9	4,286.3	551.1	316.4	5.1	153.1
Emission Factor (lb/ton lime produced) ^(b)	0.85	0.468	1.71	NA	NA	NA
Controlled PTE (lb/hr) (1 kiln)	19.83	10.90	39.84	72.23	1.17	34.95
Controlled PTE (ton/yr) (1 kiln)	86.8	47.8	174.5	316.4	5.1	153.1
Controlled PTE (ton/yr) (all 5 kilns) ^(d)	434.2	238.8	872.6	1,581.8	25.5	765.4

HAPs	HCl	HF	Benzene	Cyanide	PCDD/ PCDF
Emission Factor (lb/ton coal) ^(c)	1.2	0.15	0.0013	0.0025	2.44E-07
Uncontrolled PTE (ton/yr) (1kiln)	43.10	5.39	0.05	0.09	0

Unless otherwise specified, these emission estimates are for one kiln; Carmeuse Lime operates five identical kilns.

(a) Emission factors are from US EPA AP-42, Ch. 11.17 (2/98); except for the emission factor for VOC, which was derived from stack testing.

(b) PM10 and VOC emission factors are derived from stack tests completed from 1998 - 2001; testing was not completed for PM. However, the PM emission factor was derived by dividing the PM10 factor from the tests by the cumulative mass percent of PM10 from rotary kilns controlled by fabric filters from AP-42 Ch.11, Table 11.17-7.

(c) Emission Factors from US EPA AP-42, Ch.1.1 (2/98)

(d) The controlled PTE does not reflect any applicable emission limits.

Methodology

1 lb bituminous coal = 13,000 Btu

PTE (tons/yr) = Production capacity (ton lime/hr) x Emission Factor (lb pollutant/ton lime) x 8,760 hr/yr x 1/2,000 ton/lb

**Appendix A: Emissions Calculations
PM Emissions from Lime Processing Units**

**Company Name: Carmeuse Lime Company
Address City IN Zip: Buffington Station, Gary, IN 46402
Permit Number: T089-6140-00112
Reviewer: ERG/BS
Date: 12/1/2003**

Facility	ID	Capacity (ton/hr)	Grain Loading (gr/dscf)	Exhaust Flow Rate (dscfm)	Controlled PM/PM10 PTE			Uncontrolled PM/PM10 PTE	
					(lb/hr)	(lb/ton)	(ton/yr)	(lb/hr)	(ton/yr)
Lime Grinder	EU-15	80							
Lime Storage System	EU-14	80	0.003	16,400	0.42	0.0053	1.85	421.71	1847.11
Grinding Mill #2	EU-12	40	0.003	2,640	0.07	0.0017	0.30	67.89	297.34
Grinding Mill #1	EU-13	40	0.003	2,640	0.07	0.0017	0.30	67.89	297.34
Pugmill #1	EU-18	15.14	0.15	2,180	2.80	0.1851	12.28	2802.86	12276.51
Pugmill #2	EU-19	15.14	0.15	2,180	2.80	0.1851	12.28	2802.86	12276.51
Lime Handling System #1	EU-6	100							
Lime Storage System	EU-24	100							
Rail Lime Loadout #2	EU-28	200	0.003	12,200	0.31	0.0031	1.37	313.71	1374.07
Lime Handling System #2	EU-7	100	0.003	7,100	0.18	0.0018	0.80	182.57	799.66
Truck & Rail Lime Loadout #3	EU-8	200	0.01	15,000	1.29	0.0064	5.63	1285.71	5631.43
Truck Lime Loadout #4	EU-9	200	0.003	1,800	0.05	0.0002	0.20	46.29	202.73
Truck Flue Dust Loadout #2	EU-16	28	0.003	3,600	0.09	0.0033	0.41	92.57	405.46
Truck Flue Dust Loadout #1	EU-17	32	0.003	4,200	0.11	0.0034	0.47	108.00	473.04
Truck Loadout Station	EU-11	300							
Rail Re-Screen Loadout #2	EU-25	200	0.01	14,000	1.20	0.0060	5.26	1200.00	5256.00
Transfer Station Reclaim Hopper	EU-32	100	0.004	5,000	0.17	0.0017	0.75	171.43	750.86
TOTAL							40.04		40040.96

Note that the particulate emissions from the facilities above are controlled by baghouses.

The emissions calculations for several units are combined because they exhaust to the same control device.

METHODOLOGY

Controlled PTE (lb/hr) = Grain Loading (gr/dscf) x Exhaust Flow Rate (dscf/m) x 60 min/hr x 1/7000 lb/gr

Controlled PTE (tpy) = Controlled PTE (lb/hr) x 8760 hr/yr x 1/2000 ton/lb

Uncontrolled PTE (lb/hr) = Controlled PTE/(1 - 99.9%) (lb/hr)

Uncontrolled PTE (tpy) = Controlled PTE/(1 - 99.9%) (tpy)